

**Index of Issues:** July pp. 1-334; August, pp. 335-602; September, pp. 603-906; October, pp. 907-1184; November, pp. 1185-1564; December, pp. 1565-2032.

## SUBJECT INDEX TO VOLUME 91

Entries from JOURNAL departments are identified as follows: Case Reports—(CR); Clinical Investigations—(CI); Clinical Concepts and Commentary—(CCC); Correspondence—(CO); Editorial Views—(EV); Educational Material—(EM); Laboratory Investigations—(LI); Laboratory Reports—(LR); Medical Intelligence Article—(MI); Practical Guidelines—(PG); Reports of Scientific Meetings—(SM); Review Article—(RA); Special Article—(SA); Web Site—(WS).

### A

#### Acetaminophen

- acetaminophen inhibits spinal prostaglandin  $E_2$  release after peripheral noxious stimulation (LI) [Muth-Selbach et al.], 231
- morphine-sparing effect of acetaminophen in pediatric day-case surgery (CI) [Korpela et al.], 442

#### Acetylcholine and acetylcholine receptors

- the alkyl chain dependence of the effect of normal alcohols on agonist-induced nicotinic acetylcholine receptor desensitization kinetics (LI) [Raines and Zachariah], 222
- cecal ligation and puncture peritonitis model shows decreased nicotinic acetylcholine receptor numbers in rat muscle: immunopathologic mechanisms? (LI) [Tsukagoshi et al.], 448
- human neuronal nicotinic acetylcholine receptors expressed in *Xenopus* oocytes predict efficacy of halogenated compounds that disobey the Meyer-Overton rule (LI) [Cardoso et al.], 1370
- inhibitory effects of propofol on acetylcholine-induced endothelium-dependent relaxation and prostacyclin synthesis in rabbit mesenteric resistance arteries (LI) [Yamashita et al.], 1080
- mechanisms underlying the inhibitory effect of propofol on the contraction of canine airway smooth muscle (LI) [Lin et al.], 750
- a new twist to myopathy of critical illness (EV) [Martyn and Vincent], 337
- propofol-induced depression of cultured rat ventricular myocytes is related to the  $M_2$ -acetylcholine receptor-NO-cGMP signaling pathway (LI) [Yamamoto et al.], 1712
- sex differences in cholinergic analgesia I: a supplemental nicotinic mechanism in normal females (LI) [Chiari et al.], 1447
- sex differences in cholinergic analgesia II: differing mechanisms in two models of allodynia (LI) [Lavand'homme and Eisenach], 1455

#### Acid-base equilibrium

- cardioprotective effects of propofol and sevoflurane in ischemic and reperfused rat hearts: role of  $K_{ATP}$  channels and interaction with the sodium-hydrogen exchange inhibitor HOE 642 (captopride) (LI) [Mathur et al.], 1349
- intestinal luminal microdialysis: a new approach to assess gut mucosal ischemia (LI) [Tenhunen et al.], 1807
- mathematical equivalent of metabolic alkalosis part of the Goldberg acid-base map (CO) [Habibzadeh], 1967

#### Acidosis. See Acid-base equilibrium

#### Acquired immunodeficiency syndrome (AIDS)

- ritonavir's role in reducing fentanyl clearance and prolonging its half-life (CI) [O'kora et al.], 681

#### Acute respiratory distress syndrome. See Lung, respiratory failure

#### Addiction. See Drug abuse, addiction, and withdrawal

#### Adenosine

- adenosine: a sensitive indicator of cerebral ischemia during carotid endarterectomy (CI) [Weigand et al.], 414
- intrathecal adenosine interacts with a spinal noradrenergic system to produce antinociception in nerve-injured rats (LI) [Gomes et al.], 1072
- preclinical toxicity screening of intrathecal adenosine in rats and dogs (LI) [Chiari et al.], 824

#### Adrenergic agents and receptors

- analgesic and hemodynamic effects of intrathecal clonidine as the sole analgesic agent during first stage of labor: a dose-response study (CI) [Chiari et al.], 388
- antinociceptive and hemodynamic effects of a novel  $\alpha_2$ -adrenergic agonist, MPV-2426, in sheep (LI) [Eisenach et al.], 1425
- beneficial effects from  $\beta$ -adrenergic blockade in elderly patients undergoing noncardiac surgery (CI) [Zaugg et al.], 1674
- direct effects of  $\alpha_1$ - and  $\alpha_2$ -adrenergic agonists on spinal and cerebral pial vessels in dogs (LI) [Iida et al.], 479
- effect of mivazerol on perioperative cardiac complications during non-cardiac surgery in patients with coronary heart disease: the European mivazerol trial (EMIT) (CI) [Oliver et al.], 951
- effects of dobutamine on hemodynamics and left ventricular performance after cardiopulmonary bypass in cardiac surgical patients (CI) [Romson et al.], 1318
- epidural clonidine or bupivacaine as the sole analgesic agent during and after abdominal surgery: a comparative study (CI) [De Kock et al.], 90:1354, [erratum] 602
- hypothermia in barbiturate-anesthetized rats suppresses natural killer cell activity and compromises resistance to tumor metastasis: a role for adrenergic mechanisms (LI) [Ben-Eliyahu et al.], 732
- intrathecal adenosine interacts with a spinal noradrenergic system to produce antinociception in nerve-injured rats (LI) [Gomes et al.], 1072
- intravenous regional anesthesia using lidocaine and clonidine (CI) [Reuben et al.], 654

#### Adult respiratory distress syndrome. See Lung, respiratory failure

#### Aging

- anesthetic management of the elderly: measuring function beyond the immediate perioperative horizon (EV) [Raja and Haythornthwaite], 909
- beneficial effects from  $\beta$ -adrenergic blockade in elderly patients undergoing noncardiac surgery (CI) [Zaugg et al.], 1674

#### Air embolism

- cerebral microembolism diagnosed by transcranial Doppler during total knee arthroplasty: correlation with transesophageal echocardiography (CI) [Sulek et al.], 672
- hemodilution during venous gas embolization improves gas exchange, without altering  $\dot{V}_{A-Q}$  or pulmonary blood flow distributions (LI) [Decem et al.], 1861
- liquid ventilation: a theoretically beneficial approach in treating systemic air embolism in lung trauma (CO) [Schulz-Stübner], 1963
- minimizing venous air embolism from reinfusion bags (CO), [Benumof], 1962
- probable carbon dioxide embolism during endoscopically assisted varicose vein stripping (CR) [Vidovich and Lojeski], 1527

#### Airway management. See also Intubation

- airway exchange catheters: simple concept, potentially great danger (EV) [Benumof], 342
- airway injury during anesthesia: a closed claims analysis (CI) [Domino et al.], 1703
- carbon dioxide monitoring during deep conscious sedation using nasopharyngeal airways (CO) [Dominguez], 1177

case of Cowden's disease that caused airway obstruction during induction of anesthesia (CR) [Omote et al.], 1537

catastrophic caudal spread of a peritonsillar abscess: a case report (CR) [Manecke et al.], 1956

cervical spine instability and dwarfism: fiberoptic intubations for all (CO), [Auden], 580

clinical assessment of a plastic optical fiber stylet for human tracheal intubation (CI) [Gravenstein et al.], 648

controlled intermittent aerosolization of lidocaine for airway anesthesia (CO) [Balatbat et al.], 596

efficiency of a new fiberoptic stylet scope in tracheal intubation (CI) [Kitamura et al.], 1628

endotracheal tube fire: comments on the advisability of not extubating (CO), [Wolf and Sidebotham], 888

the esophageal detector device is unreliable when the stomach has been ventilated (CR) [Andres and Langenstein], 566

evaluation of tracheal intubation difficulty in patients with cervical spine immobilization: fiberoptic (WuScope) versus conventional laryngoscopy (CI) [Smith et al.], 1253

Fastrach uses a low-volume, high-pressure cuff for the endotracheal tube system (CO), [Wiesel and Warm], 592

a hairy situation (CO) [Johnson et al.], 595

inflation of the endotracheal tube cuff in the pharynx for ventilation of paralyzed patients with unanticipated difficult airway (CO) [Panadero et al.], 1178

intramuscular rocuronium in infants and children: a multicenter study to evaluate tracheal intubating conditions, onset, and duration of action (CI) [Kaplan et al.], 633

intubation of a child with a difficult airway using a laryngeal mask airway and a guidewire and jet stylet (CO) [Nitahara et al.], 330

laryngospasm treatment—an explanation (CO), [Johnstone], 581, [Larson], 582

new insights into the pathomechanism of postintubation arytenoid subluxation (CI) [Paulsen et al.], 659

oro- and nasogastric tube passage in intubated patients: fiberoptic description of where they go at the laryngeal level and how to make them enter the esophagus (CI) [Ozer and Benumof], 137

pharyngeal mucosal pressure and perfusion: a fiberoptic evaluation of the posterior pharynx in anesthetized adult patients with a modified cuffed oropharyngeal airway (CI) [Brimacombe et al.], 1661

preoxygenation: best method for both efficacy and efficiency? (EV) [Benumof], 603

questions use of nasal cannula for oxygen supplementation during cataract surgery (CO), [Livingston], 1176, [Williams and Tomlin], 1176

simple modification of the Ovassapian fiberoptic intubating airway (CO) [Aoyama et al.], 897

supraglottic obstruction versus true laryngospasm: the best treatment (CO) [Rajan], 581

tension pneumothorax complicating jet ventilation via a Cook airway exchange catheter (CR) [Baraka], 557

the three axis alignment theory and the "sniffing position:" perpetuation of an anatomic myth? (CO) [Adnet et al.], 1964

a thyroid shield can correct a laryngeal mask airway air leak (CO) [Hall], 1558

unanticipated difficult intubation as a result of an asymptomatic vallecular cyst (CR) [Kamble et al.], 872

use of the Endotrol endotracheal tube and a light wand for blind nasotracheal intubation (CO), [Asai], 1557

use of the laryngeal mask for exchange of orotracheal tubes (CR) [Asai], 1167

use of a lighted stylet for tracheal intubation through an intubating port of a mask (CO) [Uda et al.], 1560

### Airway smooth muscle

do pipecuronium and rocuronium affect human bronchial smooth muscle? (CI) [Zappi et al.], 1616

mechanisms underlying the inhibitory effect of propofol on the contraction of canine airway smooth muscle (LI) [Lin et al.], 750

### Alfentanil

alfentanil causes less postoperative nausea and vomiting than equipotent doses of fentanyl or sufentanil in outpatients (CI) [Langevin et al.], 1666

optimal propofol-alfentanil combinations for supplementing nitrous oxide for outpatient surgery (CI) [Pavlin et al.], 97

pharmacokinetic-pharmacodynamic modeling of the respiratory depressant effect of alfentanil (CI) [Bouillon et al.], 144

### Allergy and histamine

an adverse effect of carboxymethylcellulose in lidocaine jelly (CO) [Kakuyama et al.], 1969

intraoperative anaphylactic shock from bacitracin nasal packing after septorhinoplasty (CR) [Gall et al.], 1545

severe anaphylactic reaction due to a chlorhexidine-impregnated central venous catheter (CO), [Terazawa et al.], 89:1296, [notice of withdrawal] 602, [Terazawa et al.], 1296, [notice of withdrawal] 602

### Alpha-2 adrenergic agents. See Adrenergic agents and receptors

### Ambulatory care

at-home recovery after an anesthetic (CO), [Blatt], 887

can postoperative nausea and vomiting be predicted? (CI) [Sinclair et al.], 109

major ambulatory surgery with continuous regional anesthesia and a disposable infusion pump (CR) [Klein et al.], 563

management of bladder function after outpatient surgery (CI) [Pavlin et al.], 42

morphine-sparing effect of acetaminophen in pediatric day-case surgery (CI) [Korpela et al.], 442

recovery profile, costs, and patient satisfaction with propofol and sevoflurane for fast-track office-based anesthesia (EC) [Tang et al.], 253

### American Society of Anesthesiologists

the American Society of Anesthesiologists Closed Claims Project: what have we learned, how has it affected practice, and how will it affect practice in the future? (CCC) [Cheney], 552

### American Society of Critical Care Anesthesiologists

airway exchange catheters: simple concept, potentially great danger (EV) [Benumof], 342

cardiogenic failure after isolated neurologic injury: a report of two cases (CR) [Pousman and Parmley], 1165

congenital NOS2 deficiency protects mice from LPS-induced hyporesponsiveness to inhaled nitric oxide (LI) [Weimann et al.], 1744

intestinal luminal microdialysis: a new approach to assess gut mucosal ischemia (LI) [Tenhunen et al.], 1807

pulmonary aspiration of a milk/cream mixture (CR) [Brodsky et al.], 1533

transfusion-related lung injury with leukopenic reaction caused by fresh frozen plasma containing anti-NB1 (CR) [Leger et al.], 1529

use of the laryngeal mask for exchange of orotracheal tubes (CR) [Asai], 1167

Warren Zapol: true-life adventures in science, medicine, and innovation: recipient of the 1999 Excellence in Research Award [Lowenstein], 917

### $\epsilon$ -Aminocaproic acid

the effect of prophylactic  $\epsilon$ -aminocaproic acid on bleeding, transfusions, platelet function, and fibrinolysis during coronary artery bypass grafting (CI) [Troianos et al.], 430

**AMPA receptors**

barbiturates and the brain: disrupting the delicate balance (EV) [Pearce], 1190

**Anaphylactic reaction**

severe anaphylactic reaction due to a chlorhexidine-impregnated central venous catheter (CO), [Terazawa et al.], 89:1296, [notice of withdrawal] 602

**Anaphylactic shock**

intraoperative anaphylactic shock from bacitracin nasal packing after septorhinoplasty (CR) [Gall et al.], 1545

**Anatomy**

cervical spine instability and dwarfism: fiberoptic intubations for all (CO), [Auden], 580, [Redl], 580  
new insights into the pathomechanism of postintubation arytenoid subluxation (CI) [Paulsen et al.], 659  
Waldman, Atlas of Interventional Pain Management (EM) [Staats], 597

**Anesthesia machines and circuits**

Amsorb: a new carbon dioxide absorbent for use in anesthetic breathing systems (LI) [Murray et al.], 1342  
putting the brakes on anesthetic breakdown (EV) [Kharasch], 1192  
temporary malfunction of the Ohmeda Modulus CD series volume monitor caused by the overhead surgical lighting (CO), [Sattari and Reichard], 894

**Anesthesia practice**

the American Society of Anesthesiologists Closed Claims Project: what have we learned, how has it affected practice, and how will it affect practice in the future? (CCC) [Cheney], 552  
Barash et al., Clinical Anesthesia, 3rd Edition (EM) [Black], 1562  
French survey of anesthesia in 1996 (SA) [Clergue et al.], 1509  
Stoelting, Pharmacology and Physiology in Anesthesia Practice, 3rd Edition (EM) [Thomas], 597  
Yao (ed.), Yao & Artusio's Anesthesiology: Problem-oriented Patient Management (EM) [Zornow], 1562

**Aneurysm**

endovascular aortic aneurysm repair in a patient with prohibitive cardiopulmonary risk (CR) [Novak et al.], 1542

**Antibacterial and antiviral agents**

intraoperative anaphylactic shock from bacitracin nasal packing after septorhinoplasty (CR) [Gall et al.], 1545  
poor antibacterial effect of ropivacaine: comparison with bupivacaine (LR) [Pere et al.], 884

**Anticholinesterases**

early reversal of rapacuronium with neostigmine (CI) [Purdy et al.], 51  
intrathecal neostigmine and sufentanil for early labor analgesia (CI) [Nelson et al.], 1293  
no enhancement of sensory and motor blockade by neostigmine added to mepivacaine axillary plexus block (CI) [Bouaziz et al.], 78  
pharmacodynamics and the plasma concentration of mivacurium during spontaneous recovery and neostigmine-facilitated recovery (CI) [Lien et al.], 119  
sex differences in cholinergic analgesia I: a supplemental nicotinic mechanism in normal females (LI) [Chiari et al.], 1447  
sex differences in cholinergic analgesia II: differing mechanisms in two models of allodynia (LI) [Lavand'homme and Eisenach], 1455

**Antiemetics. See Nausea, vomiting, and antiemetics****Antiplatelet therapy**

caution in performing epidural injections in patients on several antiplatelet drugs (CO) [Benzon et al.], 1558

**Aortic aneurysm**

endovascular aortic aneurysm repair in a patient with prohibitive cardiopulmonary risk (CR) [Novak et al.], 1542

**Apoptosis**

overexpression of bcl-x<sub>l</sub> protects astrocytes from glucose deprivation and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036

tion and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036

**ARDS (acute respiratory distress syndrome). See Lung, respiratory failure****Arrhythmias. See Heart rhythm and dysrhythmias****Aspiration**

effects of exogenous surfactant on acute lung injury induced by intratracheal instillation of infant formula or human breast milk in rabbits (LI) [Nishina et al.], 240  
high-dose nitric oxide inhalation increases lung injury after gastric aspiration (LI) [Nader et al.], 741  
pulmonary aspiration of a milk/cream mixture (CR) [Brodsky et al.], 1533  
the role of tumor necrosis factor- $\alpha$  in the pathogenesis of aspiration pneumonia in rats (LI) [Davidson et al.], 486

**Aspirin**

acetaminophen inhibits spinal prostaglandin E<sub>2</sub> release after peripheral noxious stimulation (LI) [Muth-Selbach et al.], 231  
morphine-sparing effect of acetaminophen in pediatric day-case surgery (CI) [Korpela et al.], 442

**Assessment, preoperative. See Preoperative assessment****Asthma and bronchospasm**

mechanisms underlying the inhibitory effect of propofol on the contraction of canine airway smooth muscle (LI) [Lin et al.], 750  
pretreatment intravenous lidocaine for intubation of the asthmatic patient: more data are needed (CO), [Zemenick], 318  
respiratory mechanics during xenon anesthesia in pigs: comparison with nitrous oxide (LI) [Calzia et al.], 1378

**Awareness. See Behavior, memory, and awareness****B****Bacitracin**

intraoperative anaphylactic shock from bacitracin nasal packing after septorhinoplasty (CR) [Gall et al.], 1545

**Barbiturates**

barbiturates and the brain: disrupting the delicate balance (EV) [Pearce], 1190  
blockade of glutamate receptors and barbiturate anesthesia: increased sensitivity to pentobarbital-induced anesthesia despite reduced inhibition of AMPA receptors in GluR2 null mutant mice (LI) [Joo et al.], 1329  
different actions of general anesthetics on the firing patterns of neocortical neurons mediated by the GABA<sub>A</sub> receptor (LI) [Antkowiak], 500  
interaction of intravenous anesthetics with human neuronal potassium currents in relation to clinical concentrations (LI) [Friederich and Urban], 1853  
pharmacokinetics of thiopental enantiomers during and following prolonged high-dose therapy (CI) [Cordato et al.], 1693

**Behavior, memory, and awareness**

anesthetic management of the elderly: measuring function beyond the immediate perioperative horizon (EV) [Raja and Haythornthwaite], 909  
behavioral outcomes methodology (CO), [Buckley and Korz], 1959, [Kain et al.], 1960  
forty-hertz midlatency auditory evoked potential activity predicts wakeful response during desflurane and propofol anesthesia in volunteers (CI) [Dutton et al.], 1209  
randomized trial of hypotensive epidural anesthesia in older adults (CI) [Williams-Russo et al.], 926

**Beneficence**

ethical conflicts (EV) [Rosenbaum], 3

**Bispectral index**

the changes in bispectral index during a hypovolemic cardiac arrest (CR) [England], 1947

**Blood coagulation**

anticoagulation monitoring during cardiac surgery: a review of current and emerging techniques (RA) [Despotis et al.], 1122

caution in performing epidural injections in patients on several antiplatelet drugs (CO) [Benzon et al.], 1558

the effect of prophylactic  $\epsilon$ -aminocaproic acid on bleeding, transfusions, platelet function, and fibrinolysis during coronary artery bypass grafting (CI) [Troianos et al.], 430

urinal catheter removal before unanticipated anticoagulation: the pharmacy fail-safe (CO) [Keegan and Horlocker], 328

in situ pulmonary thrombolysis using recombinant tissue plasminogen activator after cesarean delivery (CO), [Aya et al.], 578, [Nishimura et al.], 579

noncardiogenic pulmonary edema and rhabdomyolysis after protamine administration in a patient with unrecognized McArde's disease (CR) [Lobato et al.], 303

platelet-activated clotting time does not measure platelet reactivity during cardiac surgery (CI) [Shore-Lesserson et al.], 362

preoperative use of enoxaparin and tirofiban: possible association with increased bleeding postbypass (CR) [Skubas et al.], 869

propofol has both enhancing and suppressing effects on human platelet aggregation in vitro (LI) [Hirakata et al.], 1361

tissue factor expression in vital organs during murine traumatic shock: role of transcription factors AP-1 and NF-kB (LI) [Armstead et al.], 1844

**Blood pressure. See also Hypertension and antihypertensives; Hypotension**

blood pressure control with fenoldopam during excision of a pheochromocytoma (CR) [Cooper and Mihaj], 558

effect of isoflurane on in situ vascular smooth muscle transmembrane potential in spontaneous hypertension (LI) [Stekiel et al.], 207

a new noninvasive method to measure blood pressure: results of a multicenter trial (CI) [Belani et al.], 686

**Blood transfusion**

the effect of prophylactic  $\epsilon$ -aminocaproic acid on bleeding, transfusions, platelet function, and fibrinolysis during coronary artery bypass grafting (CI) [Troianos et al.], 430

extreme intraoperative blood loss and hemodilution in a Jehovah's Witness: new aspects in postoperative management (CR) [Neff et al.], 1949

immunomodulatory aspects of transfusion: a once and future risk? (CCC) [Klein], 861

perflubron emulsion delays blood transfusions in orthopedic surgery (CI) [Spahn et al.], 1195

perfluorochemical "blood substitutes": indications for an oxygen-carrying colloid (EV) [Tremper], 1185

a prospective randomized comparison of three blood conservation strategies for radical prostatectomy (CI) [Monk et al.], 24

total blood transfusion and mortality after orthotopic liver transplantation (CO) [Schroeder et al.], 329

transfusion-related lung injury with leukopenic reaction caused by fresh frozen plasma containing anti-NB1 (CR) [Leger et al.], 1529

venous access for pediatric liver transplantation (CO), [Hammer and Krane], 322, [Henderson], 323

**Blood volume**

effects of crystalloid and colloid preload on blood volume in the parturient undergoing spinal anesthesia for elective cesarean section (CI) [Ueyama et al.], 1571

spinal hypotension associated with cesarean section: will preload ever work? (EV) [Rout and Rocke], 1565

**Botulinum toxin**

management of post-thoracotomy pseudoangina and myofascial pain with botulinum toxin (CR) [Diaz and Gould], 877

**Brachial plexus block**

reverse arterial blood flow mediated local anesthetic central nervous system toxicity during axillary brachial plexus block (CO) [Dominguez and Garbaccio], 901

**Brain death**

the American Society of Anesthesiologists Closed Claims Project: what have we learned, how has it affected practice, and how will it affect practice in the future? (CCC) [Cheney], 552

ethical conflicts (EV) [Rosenbaum], 3

a matter of life and death: what every anesthesiologist should know about the medical, legal, and ethical aspects of declaring brain death (RA) [Van Norman], 275

tension pneumothorax and apnea tests (CO) [Zisfein and Marks], 326

**Brain function and disease**

adenosine: a sensitive indicator of cerebral ischemia during carotid endarterectomy (CI) [Weigand et al.], 414

barbiturates and the brain: disrupting the delicate balance (EV) [Pearce], 1190

cardiogenic failure after isolated neurologic injury: a report of two cases (CR) [Pousman and Parmley], 1165

cerebral microembolism diagnosed by transcranial Doppler during total knee arthroplasty: correlation with transesophageal echocardiography (CI) [Sulek et al.], 672

comparative pharmacodynamic modeling of the electroencephalography-slowing effect of isoflurane, sevoflurane, and desflurane (CI) [Rehberg et al.], 397

correlation between cerebral oxygen saturation measured by near-infrared spectroscopy and jugular oxygen saturation in patients with severe closed head injury (CI) [Ter Minassian et al.], 985

different actions of general anesthetics on the firing patterns of neocortical neurons mediated by the GABA<sub>A</sub> receptor (LI) [Antkowiak], 500

direct effects of  $\alpha_1$ - and  $\alpha_2$ -adrenergic agonists on spinal and cerebral pial vessels in dogs (LI) [Iida et al.], 479

effects of hypoxia-reoxygenation on microvascular endothelial function in the rat hippocampal slice (LI) [Staunton et al.], 1462

local coupling of cerebral blood flow to cerebral glucose metabolism during inhalational anesthesia in rats: desflurane versus isoflurane (LI) [Lenz et al.], 1720

overexpression of bcl-x<sub>L</sub> protects astrocytes from glucose deprivation and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036

pharmacokinetics of thiopental enantiomers during and following prolonged high-dose therapy (CI) [Cordato et al.], 1693

quantitative and qualitative effects of isoflurane on movement occurring after noxious stimulation (LI) [Antognini et al.], 1064

sevoflurane increases lumbar cerebrospinal fluid pressure in normocapnic patients undergoing transphenoidal hypophysectomy (CI) [Talke et al.], 127

suppression of central nervous system sodium channels by propofol (LI) [Rehberg and Duch], 512

**Brainstem**

tooth pulp- and facial hair mechanoreceptor-evoked responses of trigeminal sensory neurons are attenuated during ketamine anesthesia (LI) [Cairns et al.], 1025

**Bronchoscopy, fiberoptic**

clinical assessment of a plastic optical fiber stylet for human tracheal intubation (CI) [Gravenstein et al.], 648

use of the laryngeal mask for exchange of orotracheal tubes (CR) [Asai], 1167

**Bronchospasm. See Asthma and bronchospasm**

**Bupivacaine**

- bupivacaine augments intrathecal fentanyl for labor analgesia (CI) [Palmer et al.], 84
- caudal block in children: ropivacaine compared with bupivacaine (CI) [Khalil et al.], 1279
- epidural clonidine or bupivacaine as the sole analgesic agent during and after abdominal surgery: a comparative study (CI) [De Kock et al.], 90:1354, [erratum] 602
- high thoracic epidural anesthesia does not inhibit sympathetic nerve activity in the lower extremities (CI) [Magnúsdóttir et al.], 1299
- intrathecal bupivacaine in humans: influence of volume and baricity of solutions (CI) [Malinovsky et al.], 1260
- intrathecal ropivacaine for ambulatory surgery: a comparison between intrathecal bupivacaine and intrathecal ropivacaine for knee arthroscopy (CI) [Gautier et al.], 1239
- poor antibacterial effect of ropivacaine: comparison with bupivacaine (LR) [Pere et al.], 884
- regression of sensory analgesia with lumbar epidural catheters (CO), [Boylan and Sandler], 317, [Quist], 317
- stereoselectivity of bupivacaine in local anesthetic-sensitive ion channels of peripheral nerve (LI) [Nau et al.], 786

**Burn injury**

- succinylcholine hyperkalemia after burns (CO), [Gronert], 320, [Jeevendra Martyn], 321, [MacLennan et al.], 320

**C****Calcium and calcium channels. See also Ions and ion channels**

- dibucaine and tetracaine inhibit the activation of mitogen-activated protein kinase mediated by L-type calcium channels in PC12 cells (LI) [Kansha et al.], 1798
- differential effects of sevoflurane, isoflurane, and halothane on  $Ca^{2+}$  release from the sarcoplasmic reticulum of skeletal muscle (LI) [Kunst et al.], 179
- hemodynamic and metabolic manifestations of acute endotoxin infusion in pigs with and without the malignant hyperthermia mutation (LI) [Musley et al.], 833
- mechanisms underlying the inhibitory effect of propofol on the contraction of canine airway smooth muscle (LI) [Lin et al.], 750
- propofol has both enhancing and suppressing effects on human platelet aggregation in vitro (LI) [Hirakata et al.], 1361

**Capsaicin**

- tourniquet constriction exacerbates hyperalgesia-related pain induced by intradermal capsaicin injection (CI) [Byas-Smith et al.], 617

**Carbon dioxide**

- Amsorb: a new carbon dioxide absorbent for use in anesthetic breathing systems (LI) [Murray et al.], 1342
- carbon dioxide monitoring during deep conscious sedation using nasopharyngeal airways (CO) [Dominguez], 1177
- cost-efficient end-tidal carbon dioxide monitoring via Hudson-style mask (CO) [Kempen], 1176
- probable carbon dioxide embolism during endoscopically assisted varicose vein stripping (CR) [Vidovich and Lojeski], 1527
- putting the brakes on anesthetic breakdown (EV) [Kharasch], 1192

**Carbon monoxide**

- Amsorb: a new carbon dioxide absorbent for use in anesthetic breathing systems (LI) [Murray et al.], 1342
- putting the brakes on anesthetic breakdown (EV) [Kharasch], 1192

**Cardiac arrest**

- the American Society of Anesthesiologists Closed Claims Project: what have we learned, how has it affected practice, and how will it affect practice in the future? (CCC) [Cheney], 552

**Cardiac arrhythmias. See Heart rhythm and dysrhythmias****Cardiac surgery. See also Cardiovascular anesthesia; Coronary artery bypass grafting**

- anticoagulation monitoring during cardiac surgery: a review of current and emerging techniques (RA) [Despotis et al.], 1122
- effect of dobutamine on splanchnic carbohydrate metabolism and amino acid balance after cardiac surgery (CI) [Ensinger et al.], 1587
- fast tracking into the new millennium: an evolving paradigm (EV) [London et al.], 911
- management of post-thoracotomy pseudoangina and myofascial pain with botulinum toxin (CR) [Diaz and Gould], 877

**Cardioprotection**

- cardioprotective effects of propofol and sevoflurane in ischemic and reperfused rat hearts: role of  $K_{ATP}$  channels and interaction with the sodium-hydrogen exchange inhibitor HOE 642 (cariporide) (LI) [Mathur et al.], 1349
- isoflurane-enhanced recovery of canine stunned myocardium: role for protein kinase C? (LI) [Toller et al.], 713
- sevoflurane and isoflurane protect the reperfused guinea pig heart by reducing postischemic adhesion of polymorphonuclear neutrophils (LI) [Heindl et al.], 521
- sevoflurane reduces myocardial infarct size and decreases the time threshold for ischemic preconditioning in dogs (LI) [Toller et al.], 1437

**Cardiopulmonary bypass**

- anticoagulation monitoring during cardiac surgery: a review of current and emerging techniques (RA) [Despotis et al.], 1122
- effects of dobutamine on hemodynamics and left ventricular performance after cardiopulmonary bypass in cardiac surgical patients (CI) [Romson et al.], 1318
- nitecapone reduces cardiac neutrophil accumulation in clinical open heart surgery (CI) [Pesonen et al.], 355
- noncardiogenic pulmonary edema and rhabdomyolysis after protamine administration in a patient with unrecognized McArdule's disease (CR) [Lobato et al.], 303
- preoperative use of enoxaparin and tirofiban: possible association with increased bleeding postbypass (CR) [Skubas et al.], 869
- relationship between cardiopulmonary bypass flow rate and cerebral embolization in dogs (LI) [Sungurtekin et al.], 1387

**Cardiopulmonary resuscitation**

- the changes in bispectral index during a hypovolemic cardiac arrest (CR) [England], 1947
- delayed-onset epinephrine-induced pulmonary edema (CR) [Liu et al.], 1169
- recovery after discontinuation of cardiopulmonary resuscitation ("Lazarus phenomenon") (CO) [Maleck and Piper], 584
- spontaneous recovery after discontinuation of cardiopulmonary resuscitation (CO), [Frolich], 586, [MacGillivray], 585
- vagotonia and cardiac arrest during spinal anesthesia (CR) [Thrush and Downs], 1171

**Cardiovascular anesthesia. See also Cardiac surgery**

- beneficial effects from  $\beta$ -adrenergic blockade in elderly patients undergoing noncardiac surgery (CI) [Zaugg et al.], 1674
- the case of the missing fragment: detection and retrieval of a portion of broken valve as it was ejected from the heart (CR) [Michelsen and Shanewise], 560
- the changes in bispectral index during a hypovolemic cardiac arrest (CR) [England], 1947
- effect of mivazerol on perioperative cardiac complications during non-cardiac surgery in patients with coronary heart disease: the European mivazerol trial (EMIT) (CI) [Oliver et al.], 951
- the effect of prophylactic  $\epsilon$ -aminocaproic acid on bleeding, transfusions, platelet function, and fibrinolysis during coronary artery bypass grafting (CI) [Troianos et al.], 430

- endovascular aortic aneurysm repair in a patient with prohibitive cardiopulmonary risk (CR) [Novak et al.], 1542
- length-dependent regulation of left ventricular function in coronary surgery patients (CI) [De Hert et al.], 379
- life-threatening ventricular dysrhythmias with inadvertent asynchronous temporary pacing after cardiac surgery (CR) [Preisman and Cheng], 880
- nitecapone reduces cardiac neutrophil accumulation in clinical open heart surgery (CI) [Pesonen et al.], 355
- noncardiogenic pulmonary edema and rhabdomyolysis after protamine administration in a patient with unrecognized McArdle's disease (CR) [Lobato et al.], 303
- platelet-activated clotting time does not measure platelet reactivity during cardiac surgery (CI) [Shore-Lesserson et al.], 362
- preoperative use of enoxaparin and tirofiban: possible association with increased bleeding postbypass (CR) [Skubas et al.], 869
- recovery after discontinuation of cardiopulmonary resuscitation ("Lazarus phenomenon") (CO) [Maleck and Piper], 584
- relationship between cardiopulmonary bypass flow rate and cerebral embolization in dogs (LI) [Sungurtekin et al.], 1387
- risk factors of delayed extubation, prolonged length of stay in the intensive care unit, and mortality in patients undergoing coronary artery bypass graft with fast-track cardiac anesthesia: a new cardiac risk score (CI) [Wong et al.], 936
- sevoflurane and isoflurane protect the reperfused guinea pig heart by reducing postischemic adhesion of polymorphonuclear neutrophils (LI) [Heindl et al.], 521
- spontaneous recovery after discontinuation of cardiopulmonary resuscitation (CO), [Frolich], 586, [MacGillivray], 585
- systolic anterior motion of the anterior mitral leaflet after heart transplantation (CR) [Chatel et al.], 1535
- ultrasound-guided internal jugular venous cannulation in infants: a prospective comparison with the traditional palpation method (CI) [Verghese et al.], 71
- Cardiovascular function and disease. See also Heart function and disease**
- anesthetic management of the parturient with systemic lupus erythematosus, pulmonary hypertension, and pulmonary edema (CR) [Cuenco et al.], 568
- effects of propofol and remifentanyl on phrenic nerve activity and nociceptive cardiovascular responses in rabbits (LI) [Ma et al.], 1470
- Cardiovascular pharmacology**
- beneficial effects from  $\beta$ -adrenergic blockade in elderly patients undergoing noncardiac surgery (CI) [Zaugg et al.], 1674
- blood pressure control with fenoldopam during excision of a pheochromocytoma (CR) [Cooper and Mihm], 558
- contractility in humans after coronary artery surgery: echocardiographic assessment with preload-adjusted maximal power (CI) [Schmidt et al.], 58
- delayed-onset epinephrine-induced pulmonary edema (CR) [Liu et al.], 1169
- effect of dobutamine on splanchnic carbohydrate metabolism and amino acid balance after cardiac surgery (CI) [Ensinger et al.], 1587
- effects of dobutamine on hemodynamics and left ventricular performance after cardiopulmonary bypass in cardiac surgical patients (CI) [Romson et al.], 1318
- an unexpected hyperkalemic response to succinylcholine during electroconvulsive therapy for catatonic schizophrenia (CR) [Cooper et al.], 574
- Cariporide**
- cardioprotective effects of propofol and sevoflurane in ischemic and reperfused rat hearts: role of  $K_{ATP}$  channels and interaction with the sodium-hydrogen exchange inhibitor HOE 642 (cariporide) (LI) [Mathur et al.], 1349
- Carotid endarterectomy**
- adenosine: a sensitive indicator of cerebral ischemia during carotid endarterectomy (CI) [Weigand et al.], 414
- Catecholamines**
- blood pressure control with fenoldopam during excision of a pheochromocytoma (CR) [Cooper and Mihm], 558
- effect of epinephrine on lidocaine clearance in vivo: a microdialysis study in humans (CI) [Bernards and Kopacz], 962
- Catheterization, central venous. See Central venous catheter/catheterization**
- Catheterization, epidural. See Epidural anesthesia and analgesia**
- Caudal block**
- confirmation of caudal needle placement using nerve stimulation (CI) [Tsui et al.], 374
- CD-ROM**
- Delbos et al., CD-ROM: Peripheral Nerve Blocks: Lower Limb and Upper Limb (EM) [Neal], 333
- Schwid (ed.), Sedation Simulator, CD-ROM Version 1.0 for Windows (EM) [Bailey], 904
- Celecoxib**
- gastric perforation associated with the use of celecoxib (CR) [Ruben and Steinberg], 1548
- Cell and tissue culture**
- deep hypothermia and rewarming alters glutamate levels and glycogen content in cultured astrocytes (LI) [Bissonnette et al.], 1763
- hypothermia in barbiturate-anesthetized rats suppresses natural killer cell activity and compromises resistance to tumor metastasis: a role for adrenergic mechanisms (LI) [Ben-Eliyahu et al.], 732
- the mechanism of inhibitory actions of propofol on rat supraoptic neurons (LI) [Inoue et al.], 167
- overexpression of bcl-x<sub>1</sub> protects astrocytes from glucose deprivation and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036
- propofol-induced depression of cultured rat ventricular myocytes is related to the M<sub>2</sub>-acetylcholine receptor-NO-cGMP signaling pathway (LI) [Yamamoto et al.], 1712
- Central venous catheter/catheterization**
- severe anaphylactic reaction due to a chlorhexidine-impregnated central venous catheter (CO), [Terazawa et al.], 1296, [notice of withdrawal], 602
- ultrasound-guided internal jugular venous cannulation in infants: a prospective comparison with the traditional palpation method (CI) [Verghese et al.], 71
- Cerebral blood flow**
- adenosine: a sensitive indicator of cerebral ischemia during carotid endarterectomy (CI) [Weigand et al.], 414
- correlation between cerebral oxygen saturation measured by near-infrared spectroscopy and jugular oxygen saturation in patients with severe closed head injury (CI) [Ter Minassian et al.], 985
- coupling of local cerebral blood flow to local cerebral glucose utilization during isoflurane and sevoflurane anesthesia (CO), [Archer and Pappius], 889, [Lenz et al.], 890
- direct cerebral vasodilatory effects of sevoflurane and isoflurane (CI) [Matta et al.], 677
- direct effects of  $\alpha_1$ - and  $\alpha_2$ -adrenergic agonists on spinal and cerebral pial vessels in dogs (LI) [Iida et al.], 479
- effects of hypoxia-reoxygenation on microvascular endothelial function in the rat hippocampal slice (LI) [Staunton et al.], 1462
- local coupling of cerebral blood flow to cerebral glucose metabolism during inhalational anesthesia in rats: desflurane versus isoflurane (LI) [Lenz et al.], 1720
- relationship between cardiopulmonary bypass flow rate and cerebral embolization in dogs (LI) [Sungurtekin et al.], 1387

**Cerebral embolism**

relationship between cardiopulmonary bypass flow rate and cerebral embolization in dogs (LI) [Sungurtekin et al.], 1387

**Cerebral ischemia/anoxia**

adenosine: a sensitive indicator of cerebral ischemia during carotid endarterectomy (CI) [Weigand et al.], 414

effects of hypoxia-reoxygenation on microvascular endothelial function in the rat hippocampal slice (LI) [Staunton et al.], 1462

overexpression of bcl-x<sub>L</sub> protects astrocytes from glucose deprivation and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036

pharmacokinetics of thiopental enantiomers during and following prolonged high-dose therapy (CI) [Cordato et al.], 1693

**Cerebral metabolism**

correlation between cerebral oxygen saturation measured by near-infrared spectroscopy and jugular oxygen saturation in patients with severe closed head injury (CI) [Ter Minassian et al.], 985

coupling of local cerebral blood flow to local cerebral glucose utilization during isoflurane and sevoflurane anesthesia (CO), [Archer and Pappius], 889, [Lenz et al.], 890

local coupling of cerebral blood flow to cerebral glucose metabolism during inhalational anesthesia in rats: desflurane versus isoflurane (LI) [Lenz et al.], 1720

**Cerebral protection. See Neuroprotection****Cervical spine**

cervical spine instability and dwarfism: fiberoptic intubations for all (CO), [Auden], 580, [Redl], 580

evaluation of tracheal intubation difficulty in patients with cervical spine immobilization: fiberoptic (WuScope) versus conventional laryngoscopy (CI) [Smith et al.], 1253

**Cesarean delivery. See also Obstetric anesthesia**

effects of crystalloid and colloid preload on blood volume in the parturient undergoing spinal anesthesia for elective cesarean section (CI) [Ueyama et al.], 1571

the influence of the obstetrician in the relationship between epidural analgesia and cesarean section for dystocia (CI) [Segal et al.], 90

intraoperative and postoperative analgesic efficacy and adverse effects of intrathecal opioids in patients undergoing cesarean section with spinal anesthesia: a qualitative and quantitative systematic review of randomized controlled trials (RA) [Dahl et al.], 1919

in situ pulmonary thrombolysis using recombinant tissue plasminogen activator after cesarean delivery (CO), [Aya et al.], 578, [Nishimura et al.], 579

spinal hypotension associated with cesarean section: will preload ever work? (EV) [Rout and Rocke], 1565

**Chemistry**

compound A uptake and metabolism to mercapturic acids and 3,3,3-trifluoro-2-fluoromethoxypropionic acid during low-flow sevoflurane anesthesia: biomarkers for exposure, risk assessment, and interspecies comparison (CI) [Kharasch and Juibert], 1267

potential errors in the measurement of anesthetic partial pressure in blood (CR) [Lockwood et al.], 1550

putting the brakes on anesthetic breakdown (EV) [Kharasch], 1192

**Cholinergic receptors. See Acetylcholine and acetylcholine receptors****Cholinesterase**

early reversal of rapacuronium with neostigmine (CI) [Purdy et al.], 51

intrathecal neostigmine and sufentanil for early labor analgesia (CI) [Nelson et al.], 1293

no enhancement of sensory and motor blockade by neostigmine

added to mepivacaine axillary plexus block (CI) [Bouaziz et al.], 78

pharmacodynamics and the plasma concentration of mivacurium during spontaneous recovery and neostigmine-facilitated recovery (CI) [Lien et al.], 119

**Circulatory physiology and hemodynamics**

analgesic and hemodynamic effects of intrathecal clonidine as the sole analgesic agent during first stage of labor: a dose-response study (CI) [Chiari et al.], 388

anesthetic doses of sevoflurane to block cardiovascular responses to incision when administered with xenon or nitrous oxide (CI) [Nakata et al.], 369

antinociceptive and hemodynamic effects of a novel  $\alpha_2$ -adrenergic agonist, MPV-2426, in sheep (LI) [Eisenach et al.], 1425

cardiogenic failure after isolated neurologic injury: a report of two cases (CR) [Pousman and Parmley], 1165

contractility in humans after coronary artery surgery: echocardiographic assessment with preload-adjusted maximal power (CI) [Schmidt et al.], 58

correlation between cerebral oxygen saturation measured by near-infrared spectroscopy and jugular oxygen saturation in patients with severe closed head injury (CI) [Ter Minassian et al.], 985

delayed-onset epinephrine-induced pulmonary edema (CR) [Liu et al.], 1169

effect of dobutamine on splanchnic carbohydrate metabolism and amino acid balance after cardiac surgery (CI) [Ensinger et al.], 1587

effects of crystalloid and colloid preload on blood volume in the parturient undergoing spinal anesthesia for elective cesarean section (CI) [Ueyama et al.], 1571

effects of dobutamine on hemodynamics and left ventricular performance after cardiopulmonary bypass in cardiac surgical patients (CI) [Romson et al.], 1318

evaluation of neuromuscular and cardiovascular effects of two doses of rapacuronium (ORG 9487) versus mivacurium and succinylcholine (CI) [Miguel et al.], 1648

fentanyl pharmacokinetics in hemorrhagic shock: a porcine model (LI) [Egan et al.], 156

hemodynamic and metabolic manifestations of acute endotoxin infusion in pigs with and without the malignant hyperthermia mutation (LI) [Musley et al.], 833

intestinal luminal microdialysis: a new approach to assess gut mucosal ischemia (LI) [Tenhunen et al.], 1807

length-dependent regulation of left ventricular function in coronary surgery patients (CI) [De Hert et al.], 379

spinal hypotension associated with cesarean section: will preload ever work? (EV) [Rout and Rocke], 1565

Warren Zapol: true-life adventures in science, medicine, and innovation: recipient of the 1999 Excellence in Research Award [Lowenstein], 917

**Cisatracurium**

rocuronium-cisatracurium combinations (CO), [Donati and Plaud], 587, [Naguib], 588

**Clinical concepts and commentary**

clinical concepts and commentary (EV) [Weiskopf], 6

**Clinical judgment**

consistency, inter-rater reliability, and validity of 441 consecutive mock oral examinations in anesthesiology: implications for use as a tool for assessment of residents (SA) [Schubert et al.], 288

oral practice examinations: are they worth it? (EV) [James], 4

**Clinical trials**

effect of mivazero on perioperative cardiac complications during non-cardiac surgery in patients with coronary heart disease: the European mivazero trial (EMIT) (CI) [Oliver et al.], 951

- intramuscular opioid injections: a step in the wrong direction (CO) [Choinière et al.], 892, [Fitzgibbon et al.], 891
- a new noninvasive method to measure blood pressure: results of a multicenter trial (CI) [Belani et al.], 686
- a prospective randomized comparison of three blood-conservation strategies for radical prostatectomy (CI) [Monk et al.], 24
- randomized trial of hypotensive epidural anesthesia in older adults (CI) [Williams-Russo et al.], 926
- randomized trial of informed consent and recruitment for clinical trials in the immediate preoperative period (CI) [Myles et al.], 969
- the relationship between the visual analog pain intensity and pain relief scale changes during analgesic drug studies in chronic pain patients (CI) [Angst et al.], 34
- Clonidine**
- analgesic and hemodynamic effects of intrathecal clonidine as the sole analgesic agent during first stage of labor: a dose-response study (CI) [Chiari et al.], 388
- epidural clonidine or bupivacaine as the sole analgesic agent during and after abdominal surgery: a comparative study (CI) [De Kock et al.], 90:1354, [erratum] 602
- intrathecal adenosine interacts with a spinal noradrenergic system to produce antinociception in nerve-injured rats (LI) [Gomes et al.], 1072
- intravenous regional anesthesia using lidocaine and clonidine (CI) [Reuben et al.], 654
- Coagulation. See Blood coagulation**
- Cognitive function**
- anesthetic management of the elderly: measuring function beyond the immediate perioperative horizon (EV) [Raja and Haythornthwaite], 909
- randomized trial of hypotensive epidural anesthesia in older adults (CI) [Williams-Russo et al.], 926
- Colchicine**
- colchicine inhibits isoflurane-induced preconditioning (LI) [Ismail et al.], 1816
- Competence**
- consistency, inter-rater reliability, and validity of 441 consecutive mock oral examinations in anesthesiology: implications for use as a tool for assessment of residents (SA) [Schubert et al.], 288
- oral practice examinations: are they worth it? (EV) [James], 4
- Complications**
- airway exchange catheters: simple concept, potentially great danger (EV) [Benumof], 342
- airway injury during anesthesia: a closed claims analysis (CI) [Domino et al.], 1703
- anesthetic management of the parturient with systemic lupus erythematosus, pulmonary hypertension, and pulmonary edema (CR) [Cuenco et al.], 568
- aseptic meningitis after spinal anesthesia in an infant (CR) [Easley et al.], 305
- cardiogenic failure after isolated neurologic injury: a report of two cases (CR) [Pousman and Parnley], 1165
- the case of the missing fragment: detection and retrieval of a portion of broken valve as it was ejected from the heart (CR) [Michelsen and Shanewise], 560
- caution in performing epidural injections in patients on several antiplatelet drugs (CO) [Benzon et al.], 1558
- cerebral microembolism diagnosed by transcranial Doppler during total knee arthroplasty: correlation with transesophageal echocardiography (CI) [Sulek et al.], 672
- cervical spine instability and dwarfism: fiberoptic intubations for all (CO) [Auden], 580, [Redl], 580
- circulatory failure after anesthesia induction in a patient with severe primary pulmonary hypertension (CR) [Höhn et al.], 1943
- crimping of a laser tube resulting in hypoxemia (CO) [Jacobs et al.], 898
- delayed-onset epinephrine-induced pulmonary edema (CR) [Liu et al.], 1169
- early reversal of rapacuronium with neostigmine (CI) [Purdy et al.], 51
- effect of mivazero on perioperative cardiac complications during non-cardiac surgery in patients with coronary heart disease: the European mivazero trial (EMIT) (CI) [Oliver et al.], 951
- endovascular aortic aneurysm repair in a patient with prohibitive cardiopulmonary risk (CR) [Novak et al.], 1542
- epidural fibrin glue injection stops persistent postdural puncture headache (CR) [Crul et al.], 576
- the esophageal detector device is unreliable when the stomach has been ventilated (CR) [Andres and Langenstein], 566
- fast tracking into the new millennium: an evolving paradigm (EV) [London et al.], 911
- gastric perforation associated with the use of celecoxib (CR) [Reuben and Steinberg], 1548
- incidence of spinal epidural abscess after epidural analgesia: a national 1-year survey (SA) [Wang et al.], 1928
- life-threatening bilateral pneumothorax caused by misconnection of the laser lens cooling system during gynecologic laparoscopy (CO) [Gueret et al.], 1179
- life-threatening ventricular dysrhythmias with inadvertent asynchronous temporary pacing after cardiac surgery (CR) [Preisman and Cheng], 880
- management of post-thoracotomy pseudoangina and myofascial pain with botulinum toxin (CR) [Diaz and Gould], 877
- minimizing venous air embolism from reinfusion bags (CO) [Benumof], 1962
- new insights into the pathomechanism of postintubation arytenoid subluxation (CI) [Paulsen et al.], 659
- noncardiogenic pulmonary edema and rhabdomyolysis after protamine administration in a patient with unrecognized McArdle's disease (CR) [Lobato et al.], 303
- nursing workload associated with adverse events in the postanesthesia care unit (EC) [Cohen et al.], 1882
- optimal propofol-alfentanil combinations for supplementing nitrous oxide for outpatient surgery (CI) [Pavlin et al.], 97
- oro- and nasogastric tube passage in intubated patients: fiberoptic description of where they go at the laryngeal level and how to make them enter the esophagus (CI) [Ozer and Benumof], 137
- pharyngeal mucosal pressure and perfusion: a fiberoptic evaluation of the posterior pharynx in anesthetized adult patients with a modified cuffed oropharyngeal airway (CI) [Brimacombe et al.], 1661
- photosensitivity and perioperative polyneuropathy complicating orthotopic liver transplantation in a patient with erythropoietic protoporphyria (CR) [Nguyen et al.], 1173
- postpartum subdural hygroma after epidural analgesia (CR) [Verdú et al.], 867
- preoperative use of enoxaparin and tirofiban: possible association with increased bleeding postbypass (CR) [Skubas et al.], 869
- probable carbon dioxide embolism during endoscopically assisted varicose vein stripping (CR) [Vidovich and Lojeski], 1527
- recovery after discontinuation of cardiopulmonary resuscitation ("Lazarus phenomenon") (CO) [Maleck and Piper], 584
- a reliable diagnosis of porphyria should precede any conclusion concerning the safety of a drug in porphyria (CO) [Asirvatham], 584
- reverse arterial blood flow mediated local anesthetic central nervous system toxicity during axillary brachial plexus block (CO) [Dominguez and Garbaccio], 901

- rhabdomyolysis after abdominal surgery in the hyperlordotic position enforced by pneumatic support (CR) [Uratsuji et al.], 310
- severe anaphylactic reaction due to a chlorhexidine-impregnated central venous catheter (CO) [Terazawa et al.], 1296, [notice of withdrawal] 602
- signal-averaged P-wave duration does not predict atrial fibrillation after thoracic surgery (CI) [Amar et al.], 16
- spontaneous recovery after discontinuation of cardiopulmonary resuscitation (CO) [Frolich], 586, [MacGillivray], 585
- strict temperature control has no effect on injection pain with propofol (CO) [Uda et al.], 591
- succinylcholine hyperkalemia after burns (CO) [Gronert], 320, [Jeevendra Martyn], 321, [MacLennan et al.], 320
- temporary malfunction of the Ohmeda Modulus CD series volume monitor caused by the overhead surgical lighting (CO) [Sattari and Reichard], 894
- tension pneumothorax and apnea tests (CO) [Zisfein and Marks], 326
- tension pneumothorax complicating jet ventilation via a Cook airway exchange catheter (CR) [Baraka], 557
- total blood transfusion and mortality after orthotopic liver transplantation (CO) [Schroeder et al.], 329
- transfusion-related lung injury with leukopenic reaction caused by fresh frozen plasma containing anti-NB1 (CR) [Leger et al.], 1529
- trends in quality of anesthesia care associated with changing staffing patterns, productivity, and concurrency of case supervision in a teaching hospital (EC) [Posner and Freund], 839
- ulnar nerve pressure: influence of arm position and relationship to somatosensory evoked potentials (CI) [Prielipp et al.], 345
- an unexpected hyperkalemic response to succinylcholine during electroconvulsive therapy for catatonic schizophrenia (CR) [Cooper et al.], 574
- an unusual case of epidural catheter obstruction (CO) [Chandhok and Vijayakumar], 895, [Lucas], 896
- vagotonia and cardiac arrest during spinal anesthesia (CR) [Thrush and Downs], 1171
- venous access for pediatric liver transplantation (CO) [Hammer and Krane], 322, [Henderson], 323
- will we ever understand perioperative neuropathy? a fresh approach offers hope and insight (EV) [Caplan], 335
- Compound A**
- compound A uptake and metabolism to mercapturic acids and 3,3,3-trifluoro-2-fluoromethoxypropanoic acid during low-flow sevoflurane anesthesia: biomarkers for exposure, risk assessment, and interspecies comparison (CI) [Kharasch and Jubert], 1267
- putting the brakes on anesthetic breakdown (EV) [Kharasch], 1192
- Consequentialism**
- ethical conflicts (EV) [Rosenbaum], 3
- Contrast echocardiography. See Echocardiography**
- COPA. See Laryngeal mask airway and COPA**
- Coronary artery bypass grafting**
- contractility in humans after coronary artery surgery: echocardiographic assessment with preload-adjusted maximal power (CI) [Schmidt et al.], 58
- the effect of prophylactic  $\epsilon$ -aminocaproic acid on bleeding, transfusions, platelet function, and fibrinolysis during coronary artery bypass grafting (CI) [Troianos et al.], 430
- fast tracking into the new millennium: an evolving paradigm (EV) [London et al.], 911
- risk factors of delayed extubation, prolonged length of stay in the intensive care unit, and mortality in patients undergoing coronary artery bypass graft with fast-track cardiac anesthesia: a new cardiac risk score (CI) [Wong et al.], 936
- Coronary circulation and myocardial ischemia**
- anesthetic preconditioning: not just for the heart? (EV) [Lynch], 606
- assessment of the patient with cardiac disease: an anesthesiologist's paradigm (CCC) [Mangano], 1521
- beneficial effects from  $\beta$ -adrenergic blockade in elderly patients undergoing noncardiac surgery (CI) [Zaugg et al.], 1674
- cardioprotective effects of propofol and sevoflurane in ischemic and reperfused rat hearts: role of  $K_{ATP}$  channels and interaction with the sodium-hydrogen exchange inhibitor HOE 642 (cariporide) (LI) [Mathur et al.], 1349
- colchicine inhibits isoflurane-induced preconditioning (LI) [Ismaeil et al.], 1816
- effect of mivazerol on perioperative cardiac complications during non-cardiac surgery in patients with coronary heart disease: the European mivazerol trial (EMIT) (CI) [Oliver et al.], 951
- effects of dobutamine on hemodynamics and left ventricular performance after cardiopulmonary bypass in cardiac surgical patients (CI) [Romson et al.], 1318
- endovascular aortic aneurysm repair in a patient with prohibitive cardiopulmonary risk (CR) [Novak et al.], 1542
- interregional differences in the systolic and diastolic response of nonischemic myocardium to remote coronary occlusion (LI) [Marsch et al.], 815
- isoflurane-enhanced recovery of canine stunned myocardium: role for protein kinase C? (LI) [Toller et al.], 713
- length-dependent regulation of left ventricular function in coronary surgery patients (CI) [De Hert et al.], 379
- sevoflurane and isoflurane protect the reperfused guinea pig heart by reducing posts ischemic adhesion of polymorphonuclear neutrophils (LI) [Heindl et al.], 521
- sevoflurane mimics ischemic preconditioning effects on coronary flow and nitric oxide release in isolated hearts (LI) [Novolija et al.], 701
- sevoflurane reduces myocardial infarct size and decreases the time threshold for ischemic preconditioning in dogs (LI) [Toller et al.], 1437
- Corticosteroids**
- treatment of lumbosacral radiculopathy with epidural steroids (CCC) [Abram], 1937
- Cost containment**
- at-home recovery after an anesthetic (CO) [Blatt], 887, [Ebert], 887
- cost-efficient end-tidal carbon dioxide monitoring via Hudson-style mask (CO) [Kempen], 1176
- Cowden's disease**
- case of Cowden's disease that caused airway obstruction during induction of anesthesia (CR) [Omote et al.], 1537
- CPAP. See Continuous positive airway pressure**
- Critical care**
- anesthetic management of the parturient with systemic lupus erythematosus, pulmonary hypertension, and pulmonary edema (CR) [Cuenco et al.], 568
- combining partial liquid ventilation and prone position in experimental acute lung injury (LI) [Max et al.], 796
- controlled airway pressure therapy, nitric oxide inhalation, prone position, and extracorporeal membrane oxygenation (ECMO) as components of an integrated approach to ARDS (CI) [Ulrich et al.], 1577
- correlation between cerebral oxygen saturation measured by near-infrared spectroscopy and jugular oxygen saturation in patients with severe closed head injury (CI) [Ter Minassian et al.], 985
- ethics for non-emergencies (CO) [Cohen], 323
- fast tracking into the new millennium: an evolving paradigm (EV) [London et al.], 911
- a new twist to myopathy of critical illness (EV) [Martyn and Vincent], 337
- pharmacokinetics and pharmacodynamics of vecuronium in rats

- with systemic inflammatory response syndrome: treatment with  $N^G$ -monomethyl-L-arginine (LI) [Blohner et al.], 999
- pharmacokinetics of thiopental enantiomers during and following prolonged high-dose therapy (CI) [Cordato et al.], 1693
- positive end-expiratory pressure improves respiratory function in obese but not in normal subjects during anesthesia and paralysis (CI) [Pelosi et al.], 1221
- pulmonary aspiration of a milk/cream mixture (CR) [Brodsky et al.], 1533
- risk factors of delayed extubation, prolonged length of stay in the intensive care unit, and mortality in patients undergoing coronary artery bypass graft with fast-track cardiac anesthesia: a new cardiac risk score (CI) [Wong et al.], 936
- shivering complicating the treatment of neurologically impaired surgical and intensive care unit patients (CR) [Keegan et al.], 874
- Tobin (ed.), *Principles and Practice of Intensive Care Monitoring* (EM) [Breslow], 903
- transfusion-related lung injury with leukopenic reaction caused by fresh frozen plasma containing anti-NB1 (CR) [Leger et al.], 1529
- vaporized perfluorocarbon improves oxygenation and pulmonary function in an ovine model of acute respiratory distress syndrome (LI) [Bleyl et al.], 461
- ventilatory management of severe acute respiratory failure for the Year 2000 (EV) [Bigatello et al.], 1567
- Warren Zapol: true-life adventures in science, medicine, and innovation: recipient of the 1999 Excellence in Research Award [Lowenstein], 917
- Cuffed oropharyngeal airway.** *See* Laryngeal mask airway and COPA
- Cyclic GMP**
- activation of spinal N-methyl-D-aspartate receptors stimulates a nitric oxide/cyclic guanosine 3',5'-monophosphate/glutamate release cascade in nociceptive signaling (LI) [Kawamata and Omote], 1415
- sildenafil ameliorates effects of inhaled nitric oxide withdrawal (CR) [Atz and Wessel], 307
- Cyclooxygenase and inhibitors**
- acetaminophen inhibits spinal prostaglandin  $E_2$  release after peripheral noxious stimulation (LI) [Muth-Selbach et al.], 231
- evaluation of interaction between gabapentin and ibuprofen on the formalin test in rats (LI) [Yoon and Yaksh], 1006
- gastric perforation associated with the use of celecoxib (CR) [Reuben and Steinberg], 1548
- Cytokines**
- different ventilation strategies affect lung function but do not increase tumor necrosis factor- $\alpha$  and prostacyclin production in lavaged rat lungs in vivo (LI) [Verbrugge et al.], 1834
- effects of exogenous surfactant on acute lung injury induced by intratracheal instillation of infant formula or human breast milk in rabbits (LI) [Nishina et al.], 240
- exposure to cigarette smoke impairs alveolar macrophage functions during halothane and isoflurane anesthesia in rats (LI) [Kotani et al.], 1823
- hypothermia in barbiturate-anesthetized rats suppresses natural killer cell activity and compromises resistance to tumor metastasis: a role for adrenergic mechanisms (LI) [Ben-Eliyahu et al.], 732
- pancreatitis-associated protein protects the lung from leukocyte-induced injury (LI) [Heller et al.], 1408
- transfusion-related lung injury with leukopenic reaction caused by fresh frozen plasma containing anti-NB1 (CR) [Leger et al.], 1529
- volatile anesthetics augment expression of proinflammatory cytokines in rat alveolar macrophages during mechanical ventilation (LI) [Kotani et al.], 187
- D**
- Dantrolene**
- hemodynamic and metabolic manifestations of acute endotoxin infusion in pigs with and without the malignant hyperthermia mutation (LI) [Musley et al.], 833
- Denitrogenation**
- preoxygenation: best method for both efficacy and efficiency? (EV) [Benumof], 603
- Depth of anesthesia**
- additive contribution of nitrous oxide to sevoflurane minimum alveolar concentration for tracheal intubation in children (CI) [Swan et al.], 667
- auditory evoked potentials and 40-Hz oscillations: an opportunity to study mechanisms of action of general anesthetics? (EV) [Plourde], 1187
- does epidural anesthesia have general anesthetic effects? a prospective, randomized, double-blind, placebo-controlled trial (CI) [Hodgson et al.], 1687
- effects of propofol and remifentanyl on phrenic nerve activity and nociceptive cardiovascular responses in rabbits (LI) [Ma et al.], 1470
- forty-hertz midlatency auditory evoked potential activity predicts wakeful response during desflurane and propofol anesthesia in volunteers (CI) [Dutton et al.], 1209
- isoflurane blunts electroencephalographic and thalamic-reticular formation responses to noxious stimulation in goats (LI) [Antognini and Carstens], 1770
- Desflurane**
- comparative pharmacodynamic modeling of the electroencephalography-slowing effect of isoflurane, sevoflurane, and desflurane (CI) [Rehberg et al.], 397
- forty-hertz midlatency auditory evoked potential activity predicts wakeful response during desflurane and propofol anesthesia in volunteers (CI) [Dutton et al.], 1209
- local coupling of cerebral blood flow to cerebral glucose metabolism during inhalational anesthesia in rats: desflurane versus isoflurane (LI) [Lenz et al.], 1720
- specific actions of halothane, isoflurane, and desflurane on sympathetic activity and A $\delta$  and C somatosympathetic reflexes recorded in renal nerves in dogs (LI) [Pac-Soo et al.], 470
- Dibucaine**
- dibucaine and tetracaine inhibit the activation of mitogen-activated protein kinase mediated by L-type calcium channels in PC12 cells (LI) [Kansha et al.], 1798
- Diclofenac**
- spinal antinociceptive effect of epidural nonsteroidal antiinflammatory drugs on nitric oxide-induced hyperalgesia in rats (LI) [Masue et al.], 198
- Difficult airway.** *See* Airway management
- Diprivan**
- growth of *Staphylococcus aureus* in Diprivan and Intralipid: implications on the pathogenesis of infections (LI) [Langevin et al.], 1394
- Dobutamine**
- effect of dobutamine on splanchnic carbohydrate metabolism and amino acid balance after cardiac surgery (CI) [Ensinger et al.], 1587
- effects of dobutamine on hemodynamics and left ventricular performance after cardiopulmonary bypass in cardiac surgical patients (CI) [Romson et al.], 1318
- Dopaminergic agents and receptors**
- blood pressure control with fenoldopam during excision of a pheochromocytoma (CR) [Cooper and Mihm], 558
- halothane and isoflurane increase spontaneous but reduce the N-methyl-D-aspartate-evoked dopamine release in rat striatal

- slices: evidence for direct presynaptic effects (LI) [Keita et al.], 1788
- Drug abuse, addiction, and withdrawal**  
rapid opioid detoxification during general anesthesia: a review of 20 patients (CI) [Gold et al.], 1639
- Drug delivery**  
failure of a patient-controlled analgesia pump in a hyperbaric environment (CR) [Sánchez-Guijo et al.], 1540  
major ambulatory surgery with continuous regional anesthesia and a disposable infusion pump (CR) [Klein et al.], 563
- Drug interactions**  
additive contribution of nitrous oxide to sevoflurane minimum alveolar concentration for tracheal intubation in children (CI) [Swan et al.], 667  
analgesic interaction between intrathecal midazolam and glutamate receptor antagonists on thermal-induced pain in rats (LI) [Nishiyama et al.], 531  
caution in performing epidural injections in patients on several antiplatelet drugs (CO) [Benzon et al.], 1558  
effects of propofol and remifentanyl on phrenic nerve activity and nociceptive cardiovascular responses in rabbits (LI) [Ma et al.], 1470  
evaluation of interaction between gabapentin and ibuprofen on the formalin test in rats (LI) [Yoon and Yaksh], 1006  
intrathecal adenosine interacts with a spinal noradrenergic system to produce antinociception in nerve-injured rats (LI) [Gomes et al.], 1072  
preoperative history and package inserts (CO) [Ward], 899  
rocuronium-cisatracurium combinations (CO), [Donati and Plaud], 587, [Naguib], 588
- Drug metabolism**  
compound A uptake and metabolism to mercapturic acids and 3,3,3-trifluoro-2-fluoromethoxypropanoic acid during low-flow sevoflurane anesthesia: biomarkers for exposure, risk assessment, and interspecies comparison (CI) [Kharasch and Jubert], 1267  
putting the brakes on anesthetic breakdown (EV) [Kharasch], 1192  
ritonavir's role in reducing fentanyl clearance and prolonging its half-life (CI) [Olkkola et al.], 681
- Drug toxicity**  
Amsorb: a new carbon dioxide absorbent for use in anesthetic breathing systems (LI) [Murray et al.], 1342  
compound A uptake and metabolism to mercapturic acids and 3,3,3-trifluoro-2-fluoromethoxypropanoic acid during low-flow sevoflurane anesthesia: biomarkers for exposure, risk assessment, and interspecies comparison (CI) [Kharasch and Jubert], 1267  
"label" versus "labeling" of a drug: there is a significant difference (CO), [Landow], 1557, [Moore], 1556  
preclinical toxicity screening of intrathecal adenosine in rats and dogs (LI) [Chiari et al.], 824  
putting the brakes on anesthetic breakdown (EV) [Kharasch], 1192  
reverse arterial blood flow mediated local anesthetic central nervous system toxicity during axillary brachial plexus block (CO) [Dominguez and Garbaccio], 901
- Dural puncture**  
epidural fibrin glue injection stops persistent postdural puncture headache (CR) [Crul et al.], 576  
postpartum subdural hygroma after epidural analgesia (CR) [Verdú et al.], 867
- Dwarfism**  
cervical spine instability and dwarfism: fiberoptic intubations for all (CO), [Auden], 580, [Redd], 580
- Dysrhythmias, cardiac. See Heart rhythm and dysrhythmias**
- E**
- Echocardiography**  
assessment of the patient with cardiac disease: an anesthesiologist's paradigm (CCC) [Mangano], 1521  
the case of the missing fragment: detection and retrieval of a portion of broken valve as it was ejected from the heart (CR) [Michelsen and Shanewise], 560  
cerebral microembolism diagnosed by transcranial Doppler during total knee arthroplasty: correlation with transesophageal echocardiography (CI) [Sulek et al.], 672  
contractility in humans after coronary artery surgery: echocardiographic assessment with preload-adjusted maximal power (CI) [Schmidt et al.], 58  
effects of dobutamine on hemodynamics and left ventricular performance after cardiopulmonary bypass in cardiac surgical patients (CI) [Romson et al.], 1318  
length-dependent regulation of left ventricular function in coronary surgery patients (CI) [De Hert et al.], 379  
systolic anterior motion of the anterior mitral leaflet after heart transplantation (CR) [Chatel et al.], 1535  
ultrasound-guided internal jugular venous cannulation in infants: a prospective comparison with the traditional palpation method (CI) [Verghese et al.], 71
- Economics, management, and manpower**  
at-home recovery after an anesthetic (CO), [Blatt], 887, [Ebert], 887  
fast tracking into the new millennium: an evolving paradigm (EV) [London et al.], 911  
forecasting surgical groups' total hours of elective cases for allocation of block time: application of time series analysis to operating room management (EC) [Dexter et al.], 1501  
French survey of anesthesia in 1996 (SA) [Clergue et al.], 1509  
nursing workload associated with adverse events in the postanesthesia care unit (EC) [Cohen et al.], 1882  
prediction bounds for case scheduling: interpret with caution (CO), [Dexter], 590, [Overdyk and Rust], 589  
recovery profile, costs, and patient satisfaction with propofol and sevoflurane for fast-track office-based anesthesia (EC) [Tang et al.], 253  
risk factors of delayed extubation, prolonged length of stay in the intensive care unit, and mortality in patients undergoing coronary artery bypass graft with fast-track cardiac anesthesia: a new cardiac risk score (CI) [Wong et al.], 936  
statistical method to evaluate management strategies to decrease variability in operating room utilization (EC) [Dexter et al.], 262  
trends in quality of anesthesia care associated with changing staffing patterns, productivity, and concurrency of case supervision in a teaching hospital (EC) [Posner and Freund], 839  
which algorithm for scheduling add-on elective cases maximizes operating room utilization? use of bin packing algorithms and fuzzy constraints in operating room management (EC) [Dexter et al.], 1491
- Editorial views**  
airway exchange catheters: simple concept, potentially great danger (EV) [Benumof], 342  
anesthetic management of the elderly: measuring function beyond the immediate perioperative horizon (EV) [Raja and Haythornthwaite], 909  
anesthetic preconditioning: not just for the heart? (EV) [Lynch], 606  
auditory evoked potentials and 40-Hz oscillations: an opportunity to study mechanisms of action of general anesthetics? (EV) [Plourde], 1187  
barbiturates and the brain: disrupting the delicate balance (EV) [Pearce], 1190  
clinical concepts and commentary (EV) [Weiskopf], 6

- ethical conflicts (EV) [Rosenbaum], 3
- fast tracking into the new millennium: an evolving paradigm (EV) [London et al.], 911
- the importance of professional obligations: nonpatient care obligations of anesthesiologists (EV) [Neeld], 915
- the legal system and patient safety: charting a divergent course: the relationship between malpractice litigation and human errors (EV) [Liang and Cullen], 609
- a new twist to myopathy of critical illness (EV) [Martyn and Vincent], 337
- obstetric anesthesia: what have you done for us lately? (EV) [Eisenach], 907
- oral practice examinations: are they worth it? (EV) [James], 4
- perfluorochemical "blood substitutes": indications for an oxygen-carrying colloid (EV) [Tremper], 1185
- preoxygenation: best method for both efficacy and efficiency? (EV) [Benumof], 603
- putting the brakes on anesthetic breakdown (EV) [Kharasch], 1192
- regional anesthesia and postoperative pain management: long-term benefits from a short-term intervention (EV) [Todd and Brown], 1
- spinal hypotension associated with cesarean section: will preload ever work? (EV) [Rout and Rocke], 1565
- vaporized perfluorocarbon: taking the "liquid" out of liquid ventilation (EV) [Warner], 340
- ventilatory management of severe acute respiratory failure for the Year 2000 (EV) [Bigatello et al.], 1567
- will we ever understand perioperative neuropathy? a fresh approach offers hope and insight (EV) [Caplan], 335
- Education**
- consistency, inter-rater reliability, and validity of 441 consecutive mock oral examinations in anesthesiology: implications for use as a tool for assessment of residents (SA) [Schubert et al.], 288
- oral practice examinations: are they worth it? (EV) [James], 4
- Eicosanoids**
- acetaminophen inhibits spinal prostaglandin E<sub>2</sub> release after peripheral noxious stimulation (LI) [Muth-Selbach et al.], 231
- propofol has both enhancing and suppressing effects on human platelet aggregation in vitro (LI) [Hirakata et al.], 1361
- Electrocardiography**
- assessment of the patient with cardiac disease: an anesthesiologist's paradigm (CCC) [Mangano], 1521
- signal-averaged P-wave duration does not predict atrial fibrillation after thoracic surgery (CI) [Amar et al.], 16
- Electroconvulsive therapy**
- an unexpected hyperkalemic response to succinylcholine during electroconvulsive therapy for catatonic schizophrenia (CR) [Cooper et al.], 574
- Electroencephalography (EEG)**
- auditory evoked potentials and 40-Hz oscillations: an opportunity to study mechanisms of action of general anesthetics? (EV) [Plourde], 1187
- the changes in bispectral index during a hypovolemic cardiac arrest (CR) [England], 1947
- changes in electroencephalogram and autonomic cardiovascular activity during induction of anesthesia with sevoflurane compared with halothane in children (CI) [Constant et al.], 1604
- comparative pharmacodynamic modeling of the electroencephalography-slowing effect of isoflurane, sevoflurane, and desflurane (CI) [Rehberg et al.], 397
- epileptiform discharges during 2 MAC sevoflurane anesthesia in two healthy volunteers (CR) [Kaisti et al.], 1952
- epileptiform electroencephalogram during mask induction of anesthesia with sevoflurane (CI) [Yli-Hankala et al.], 1596
- isoflurane blunts electroencephalographic and thalamic-reticular formation responses to noxious stimulation in goats (LI) [Antognini and Carstens], 1770
- shivering complicating the treatment of neurologically impaired surgical and intensive care unit patients (CR) [Keegan et al.], 874
- Embolism**
- the case of the missing fragment: detection and retrieval of a portion of broken valve as it was ejected from the heart (CR) [Michelsen and Shanewise], 560
- Embolism, air. See Air embolism**
- Embolism, cerebral. See Cerebral embolism**
- Embolism, fat. See Fat embolism**
- Endocrinology and metabolism. See also Diabetes mellitus**
- beneficial effects from  $\beta$ -adrenergic blockade in elderly patients undergoing noncardiac surgery (CI) [Zaugg et al.], 1674
- Endotoxin**
- congenital NOS2 deficiency protects mice from LPS-induced hyporesponsiveness to inhaled nitric oxide (LI) [Weimann et al.], 1744
- inhibition of nitric oxide synthase prevents hyporesponsiveness to inhaled nitric oxide in lungs from endotoxin-challenged rats (LI) [Holzmann et al.], 215
- selective iNOS inhibition attenuates acetylcholine- and bradykinin-induced vasoconstriction in lipopolysaccharide-exposed rat lungs (LI) [Fischer et al.], 1724
- Endotracheal intubation. See also Intubation**
- additive contribution of nitrous oxide to sevoflurane minimum alveolar concentration for tracheal intubation in children (CI) [Swan et al.], 667
- airway exchange catheters: simple concept, potentially great danger (EV) [Benumof], 342
- cervical spine instability and dwarfism: fiberoptic intubations for all (CO), [Auden], 580, [Redl], 580
- digital display of endotracheal tube cuff pressures made simple (CO) [Doyle], 329
- efficiency of a new fiberoptic stylet scope in tracheal intubation (CI) [Kitamura et al.], 1628
- endotracheal tube fire: comments on the advisability of not extubating (CO), [Chee and Benumof], 889, [Wolf and Sidebotham], 888
- the esophageal detector device is unreliable when the stomach has been ventilated (CR) [Andres and Langenstein], 566
- evaluation of tracheal intubation difficulty in patients with cervical spine immobilization: fiberoptic (WuScope) versus conventional laryngoscopy (CI) [Smith et al.], 1253
- Fastrach uses a low-volume, high-pressure cuff for the endotracheal tube system (CO), [Wiesel and Warm], 592, [Young], 593
- how to perform differential lung ventilation in pediatric cases? (CO) [Tsujiimoto et al.], 327
- inflation of the endotracheal tube cuff in the pharynx for ventilation of paralyzed patients with unanticipated difficult airway (CO) [Panadero et al.], 1178
- intramuscular rapacuronium in infants and children: dose-ranging and tracheal intubating conditions (CI) [Reynolds et al.], 1285
- intramuscular rocuronium in infants and children: a multicenter study to evaluate tracheal intubating conditions, onset, and duration of action (CI) [Kaplan et al.], 633
- McIntyre and Matsuki, Tracheal Intubation: Theory and Practice (EM) [Floyd], 1562
- rapid tracheal intubation with rocuronium: a probability approach to determining dose (CI) [Kirkegaard-Nielsen et al.], 131
- use of the Endotrol endotracheal tube and a light wand for blind nasotracheal intubation (CO), [Asai], 1557, [Iseki and Murakawa], 1557
- use of the laryngeal mask for exchange of orotracheal tubes (CR) [Asai], 1167

## SUBJECT INDEX TO VOLUME 91

## Endotracheal intubation—Equipment and technology

- use of a lighted stylet for tracheal intubation through an intubating port of a mask (CO) [Uda et al.], 1560
- Endotracheal tube exchangers**
- airway exchange catheters: simple concept, potentially great danger (EV) [Benumof], 342
- tension pneumothorax complicating jet ventilation via a Cook airway exchange catheter (CR) [Baraka], 557
- Endovascular graft**
- endovascular aortic aneurysm repair in a patient with prohibitive cardiopulmonary risk (CR) [Novak et al.], 1542
- Enflurane**
- effects of halothane and enflurane on ventricular conduction, refractoriness, and wavelength: a concentration-response study in isolated hearts (LI) [Aya et al.], 1873
- Enoxaparin**
- epidural catheter removal before unanticipated anticoagulation: the pharmacy fail-safe (CO) [Keegan and Horlocker], 328
- preoperative use of enoxaparin and tirofiban: possible association with increased bleeding postbypass (CR) [Skubas et al.], 869
- Epidural anesthesia and analgesia**
- analgesic and hemodynamic effects of intrathecal clonidine as the sole analgesic agent during first stage of labor: a dose-response study (CI) [Chiari et al.], 388
- anesthetic management of the elderly: measuring function beyond the immediate perioperative horizon (EV) [Raja and Haythornthwaite], 909
- antinociceptive and hemodynamic effects of a novel  $\alpha_2$ -adrenergic agonist, MPV-2426, in sheep (LI) [Eisenach et al.], 1425
- attempted placement of a thoracic epidural catheter via the caudal route in a newborn (CO) [Casta], 1965
- caudal block in children: ropivacaine compared with bupivacaine (CI) [Khalil et al.], 1279
- caution in performing epidural injections in patients on several antiplatelet drugs (CO) [Benzon et al.], 1558
- combined spinal-epidural analgesia in obstetrics (CCC) [Eisenach], 299, [erratum] 906
- confirmation of caudal needle placement using nerve stimulation (CI) [Tsui et al.], 374
- does epidural anesthesia have general anesthetic effects? a prospective, randomized, double-blind, placebo-controlled trial (CI) [Hodgson et al.], 1687
- effect of combined spinal-epidural ambulatory labor analgesia on balance (CI) [Pickering et al.], 436
- effects of perioperative analgesic technique on the surgical outcome and duration of rehabilitation after major knee surgery (CI) [Capdevila et al.], 8
- epidural catheter removal before unanticipated anticoagulation: the pharmacy fail-safe (CO) [Keegan and Horlocker], 328
- epidural clonidine or bupivacaine as the sole analgesic agent during and after abdominal surgery: a comparative study (CI) [De Kock et al.], 90:1354, [erratum] 602
- epidural fibrin glue injection stops persistent postdural puncture headache (CR) [Crul et al.], 576
- high thoracic epidural anesthesia does not inhibit sympathetic nerve activity in the lower extremities (CI) [Magnúsdóttir et al.], 1299
- incidence of spinal epidural abscess after epidural analgesia: a national 1-year survey (SA) [Wang et al.], 1928
- the influence of the obstetrician in the relationship between epidural analgesia and cesarean section for dystocia (CI) [Segal et al.], 90
- is combined spinal-epidural analgesia associated with more rapid cervical dilation in nulliparous patients when compared with conventional epidural analgesia? (CI) [Tsen et al.], 920
- lumbar sympathetic blocks speed early and second stage induced labor in nulliparous women (CI) [Leighton et al.], 90:1039, [erratum] 602
- plethysmographic pulse oximeter waveform variation as an indicator of successful epidural blockade: a prospective study (CO) [Sinha et al.], 899
- postpartum subdural hygroma after epidural analgesia (CR) [Verdú et al.], 867
- randomized trial of hypotensive epidural anesthesia in older adults (CI) [Williams-Russo et al.], 926
- regression of sensory analgesia with lumbar epidural catheters (CO), [Boylan and Sandler], 317, [Quist], 317
- spinal antinociceptive effect of epidural nonsteroidal antiinflammatory drugs on nitric oxide-induced hyperalgesia in rats (LI) [Masue et al.], 198
- treatment of lumbosacral radiculopathy with epidural steroids (CCC) [Abram], 1937
- an unusual case of epidural catheter obstruction (CO), [Chandhok and Vijayakumar], 895, [Lucas], 896
- Epiglottitis**
- unanticipated difficult intubation as a result of an asymptomatic vallecular cyst (CR) [Kamble et al.], 872
- Epiglottitis. See Airway management**
- Epinephrine**
- delayed-onset epinephrine-induced pulmonary edema (CR) [Liu et al.], 1169
- effect of epinephrine on lidocaine clearance in vivo: a microdialysis study in humans (CI) [Bernards and Kopacz], 962
- Epoietin alfa**
- a prospective randomized comparison of three blood conservation strategies for radical prostatectomy (CI) [Monk et al.], 24
- Equilibrium**
- effect of combined spinal-epidural ambulatory labor analgesia on balance (CI) [Pickering et al.], 436
- Equipment and technology**
- airway exchange catheters: simple concept, potentially great danger (EV) [Benumof], 342
- Amsorb: a new carbon dioxide absorbent for use in anesthetic breathing systems (LI) [Murray et al.], 1342
- clinical assessment of a plastic optical fiber stylet for human tracheal intubation (CI) [Gravenstein et al.], 648
- controlled intermittent aerosolization of lidocaine for airway anesthesia (CO) [Balatbat et al.], 596
- correlation between cerebral oxygen saturation measured by near-infrared spectroscopy and jugular oxygen saturation in patients with severe closed head injury (CI) [Ter Minassian et al.], 985
- crimping of a laser tube resulting in hypoxemia (CO) [Jacobs et al.], 898
- evaluation of tracheal intubation difficulty in patients with cervical spine immobilization: fiberoptic (WuScope) versus conventional laryngoscopy (CI) [Smith et al.], 1253
- failure of a patient-controlled analgesia pump in a hyperbaric environment (CR) [Sánchez-Guijo et al.], 1540
- Fastrach uses a low-volume, high-pressure cuff for the endotracheal tube system (CO), [Wiesel and Warm], 592, [Young], 593
- life-threatening bilateral pneumothorax caused by misconnection of the laser lens cooling system during gynecologic laparoscopy (CO) [Gueret et al.], 1179
- life-threatening ventricular dysrhythmias with inadvertent asynchronous temporary pacing after cardiac surgery (CR) [Preisman and Cheng], 880
- a new noninvasive method to measure blood pressure: results of a multicenter trial (CI) [Belani et al.], 686
- questions use of nasal cannula for oxygen supplementation during cataract surgery (CO), [Livingston], 1176, [Williams and Tomlin], 1176

- a simple and handy way to affix a safety pin to an earpiece tubing (CO) [Yamashita and Osaka], 1561
- simple modification of the Ovassapian fiberoptic intubating airway (CO) [Aoyama et al.], 897
- temporary malfunction of the Ohmeda Modulus CD series volume monitor caused by the overhead surgical lighting (CO), [Riddle], 895, [Sattari and Reichard], 894
- tension pneumothorax complicating jet ventilation via a Cook airway exchange catheter (CR) [Baraka], 557
- a thyroid shield can correct a laryngeal mask airway air leak (CO) [Hall], 1558
- an unusual case of epidural catheter obstruction (CO), [Chandhok and Vijayakumar], 895, [Lucas], 896
- use of the Endotrol endotracheal tube and a light wand for blind nasotracheal intubation (CO), [Asai], 1557, [Iseki and Murakawa], 1557
- use of a lighted stylet for tracheal intubation through an intubating port of a mask (CO) [Uda et al.], 1560
- Erythropoietin**
- a prospective randomized comparison of three blood conservation strategies for radical prostatectomy (CI) [Monk et al.], 24
- Esophageal detector device**
- the esophageal detector device is unreliable when the stomach has been ventilated (CR) [Andres and Langenstein], 566
- Ethanol**
- different actions of general anesthetics on the firing patterns of neocortical neurons mediated by the GABA<sub>A</sub> receptor (LI) [Antkowiak], 500
- Ethics**
- ethical conflicts (EV) [Rosenbaum], 3
- ethics for non-emergencies (CO), [Cohen], 323, [Rosenfeld and Balser], 323
- the importance of professional obligations: nonpatient care obligations of anesthesiologists (EV) [Neeld], 915
- a matter of life and death: what every anesthesiologist should know about the medical, legal, and ethical aspects of declaring brain death (RA) [Van Norman], 275
- nonpatient care obligations of anesthesiologists (SA) [Waisel], 1152
- plagiarism and authorship (CO), [Partridge], 324, [Todd], 325
- randomized trial of informed consent and recruitment for clinical trials in the immediate preoperative period (CI) [Myles et al.], 969
- trademark? (CO), [Baum], 582
- Evoked potentials, auditory**
- auditory evoked potentials and 40-Hz oscillations: an opportunity to study mechanisms of action of general anesthetics? (EV) [Plourde], 1187
- forty-hertz midlatency auditory evoked potential activity predicts wakeful response during desflurane and propofol anesthesia in volunteers (CI) [Dutton et al.], 1209
- Evoked potentials, somatosensory**
- ulnar nerve pressure: influence of arm position and relationship to somatosensory evoked potentials (CI) [Prielipp et al.], 345
- Excellence in Research Award**
- Warren Zapol: true-life adventures in science, medicine, and innovation: recipient of the 1999 Excellence in Research Award [Lowenstein], 917
- Excitatory amino acids**
- deep hypothermia and rewarming alters glutamate levels and glycogen content in cultured astrocytes (LI) [Bissonnette et al.], 1763
- Extracorporeal membrane oxygenation**
- controlled airway pressure therapy, nitric oxide inhalation, prone position, and extracorporeal membrane oxygenation (ECMO) as components of an integrated approach to ARDS (CI) [Ulrich et al.], 1577
- Eye surgery**
- questions use of nasal cannula for oxygen supplementation during cataract surgery (CO), [Livingston], 1176
- F**
- Facial hair**
- a hairy situation (CO) [Johnson et al.], 595
- Fenoldopam**
- blood pressure control with fenoldopam during excision of a pheochromocytoma (CR) [Cooper and Mihm], 558
- Fentanyl**
- alfentanil causes less postoperative nausea and vomiting than equipotent doses of fentanyl or sufentanil in outpatients (CI) [Langevin et al.], 1666
- bupivacaine augments intrathecal fentanyl for labor analgesia (CI) [Palmer et al.], 84
- comparison of the intubation conditions provided by rapacurium (ORG 9487) or succinylcholine in humans during anesthesia with fentanyl and propofol (CI) [Fleming et al.], 1311
- fentanyl pharmacokinetics in hemorrhagic shock: a porcine model (LI) [Egan et al.], 156
- ritonavir's role in reducing fentanyl clearance and prolonging its half-life (CI) [Oikkola et al.], 681
- Ferritin**
- overexpression of bcl-x<sub>L</sub> protects astrocytes from glucose deprivation and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036
- Fetal/neonatal function and disease**
- management of anesthesia for the pregnant surgical patient (CCC) [Rosen], 1159
- Fibrin glue**
- epidural fibrin glue injection stops persistent postdural puncture headache (CR) [Crul et al.], 576
- Fluids and electrolytes**
- effects of crystalloid and colloid preload on blood volume in the parturient undergoing spinal anesthesia for elective cesarean section (CI) [Ueyama et al.], 1571
- spinal hypotension associated with cesarean section: will preload ever work? (EV) [Rout and Rocke], 1565
- Fluorocarbons**
- combining partial liquid ventilation and prone position in experimental acute lung injury (LI) [Max et al.], 796
- perflubron emulsion delays blood transfusions in orthopedic surgery (CI) [Spahn et al.], 1195
- perfluorochemical "blood substitutes": indications for an oxygen-carrying colloid (EV) [Tremper], 1185
- vaporized perfluorocarbon: taking the "liquid" out of liquid ventilation (EV) [Warner], 340
- vaporized perfluorocarbon improves oxygenation and pulmonary function in an ovine model of acute respiratory distress syndrome (LI) [Bleyl et al.], 461
- Food and Drug Administration (FDA)**
- "label" versus "labeling" of a drug: there is a significant difference (CO), [Landow], 1557, [Moore], 1556
- preoperative history and package inserts (CO) [Ward], 899
- France**
- French survey of anesthesia in 1996 (SA) [Clergue et al.], 1509
- Free radicals and superoxide**
- nitecapone reduces cardiac neutrophil accumulation in clinical open heart surgery (CI) [Pesonen et al.], 355
- overexpression of bcl-x<sub>L</sub> protects astrocytes from glucose deprivation and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036

## G

**GABA and GABA receptors**

- different actions of general anesthetics on the firing patterns of neocortical neurons mediated by the GABA<sub>A</sub> receptor (LI) [Antkowiak], 500
- effects of halothane on synaptic neurotransmission to medullary expiratory neurons in the ventral respiratory group of dogs (LI) [Stuth et al.], 804
- the mechanism of inhibitory actions of propofol on rat supraoptic neurons (LI) [Inoue et al.], 167

**Gabapentin**

- evaluation of interaction between gabapentin and ibuprofen on the formalin test in rats (LI) [Yoon and Yaksh], 1006

**Gas anesthesia and anesthetics. See also Inhalation anesthesia and anesthetics**

- additive contribution of nitrous oxide to sevoflurane minimum alveolar concentration for tracheal intubation in children (CI) [Swan et al.], 667
- the analgesic action of nitrous oxide is dependent on the release of norepinephrine in the dorsal horn of the spinal cord (LI) [Zhang et al.], 1401
- anesthetic doses of sevoflurane to block cardiovascular responses to incision when administered with xenon or nitrous oxide (CI) [Nakata et al.], 369
- causes of nitrous oxide contamination in operating rooms (CO), [Byhahn and Westphal], 1960, [Kanmura], 1961
- xenon does not trigger malignant hyperthermia in susceptible swine (LI) [Froeba et al.], 1047

**Gas exchange. See Lung, gas exchange****Gastric tonometry**

- intestinal luminal microdialysis: a new approach to assess gut mucosal ischemia (LI) [Tenhunen et al.], 1807

**Gastrointestinal function and disease**

- gastric perforation associated with the use of celecoxib (CR) [Ruben and Steinberg], 1548

**Gender factors**

- sex differences in cholinergic analgesia I: a supplemental nicotinic mechanism in normal females (LI) [Chiari et al.], 1447
- sex differences in cholinergic analgesia II: differing mechanisms in two models of allodynia (LI) [Lavand'homme and Eisenach], 1455

**Gene expression**

- tissue factor expression in vital organs during murine traumatic shock: role of transcription factors AP-1 and NF- $\kappa$ B (LI) [Armstead et al.], 1844

**Geriatric patients**

- anesthetic management of the elderly: measuring function beyond the immediate perioperative horizon (EV) [Raja and Haythornthwaite], 909
- randomized trial of hypotensive epidural anesthesia in older adults (CI) [Williams-Russo et al.], 926

**Glucose and glucose metabolism**

- deep hypothermia and rewarming alters glutamate levels and glycogen content in cultured astrocytes (LI) [Bissonnette et al.], 1763
- overexpression of bcl-x<sub>L</sub> protects astrocytes from glucose deprivation and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036

**Glutamate and glutamate receptors**

- activation of spinal N-methyl-D-aspartate receptors stimulates a nitric oxide/cyclic guanosine 3',5'-monophosphate/glutamate release cascade in nociceptive signaling (LI) [Kawamata and Omote], 1415
- analgesic interaction between intrathecal midazolam and glutamate

receptor antagonists on thermal-induced pain in rats (LI) [Nishiyama et al.], 531

barbiturates and the brain: disrupting the delicate balance (EV) [Pearce], 1190

blockade of glutamate receptors and barbiturate anesthesia: increased sensitivity to pentobarbital-induced anesthesia despite reduced inhibition of AMPA receptors in GluR2 null mutant mice (LI) [Joo et al.], 1329

deep hypothermia and rewarming alters glutamate levels and glycogen content in cultured astrocytes (LI) [Bissonnette et al.], 1763

direct inhibition of the N-methyl-D-aspartate receptor channel by high concentrations of opioids (LI) [Yamakura et al.], 1053

effects of halothane on synaptic neurotransmission to medullary expiratory neurons in the ventral respiratory group of dogs (LI) [Stuth et al.], 804

evaluation of interaction between gabapentin and ibuprofen on the formalin test in rats (LI) [Yoon and Yaksh], 1006

halothane and isoflurane increase spontaneous but reduce the N-methyl-D-aspartate-evoked dopamine release in rat striatal slices: evidence for direct presynaptic effects (LI) [Keita et al.], 1788

influence of preemptive treatment with MK-801, an N-methyl-D-aspartate receptor antagonist, on development of neuropathic symptoms induced by spinal nerve ligation in the rat (LR) [Wei and Pertovaara], 313

the mechanism of inhibitory actions of propofol on rat supraoptic neurons (LI) [Inoue et al.], 167

pharmacokinetics and pharmacodynamics of vecuronium in rats with systemic inflammatory response syndrome: treatment with N<sup>G</sup>-monomethyl-L-arginine (LI) [Blobner et al.], 999

tooth pulp- and facial hair mechanoreceptor-evoked responses of trigeminal sensory neurons are attenuated during ketamine anesthesia (LI) [Cairns et al.], 1025

**Glutathione**

overexpression of bcl-x<sub>L</sub> protects astrocytes from glucose deprivation and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036

**G-proteins**

propofol has both enhancing and suppressing effects on human platelet aggregation in vitro (LI) [Hirakata et al.], 1361

## H

**Halothane**

differential effects of sevoflurane, isoflurane, and halothane on Ca<sup>2+</sup> release from the sarcoplasmic reticulum of skeletal muscle (LI) [Kunst et al.], 179

effects of halothane and enflurane on ventricular conduction, refractoriness, and wavelength: a concentration-response study in isolated hearts (LI) [Aya et al.], 1873

effects of halothane on synaptic neurotransmission to medullary expiratory neurons in the ventral respiratory group of dogs (LI) [Stuth et al.], 804

exposure to cigarette smoke impairs alveolar macrophage functions during halothane and isoflurane anesthesia in rats (LI) [Kotani et al.], 1825

halothane and isoflurane increase spontaneous but reduce the N-methyl-D-aspartate-evoked dopamine release in rat striatal slices: evidence for direct presynaptic effects (LI) [Keita et al.], 1788

quantitative and qualitative effects of isoflurane on movement occurring after noxious stimulation (LI) [Antognini et al.], 1064

specific actions of halothane, isoflurane, and desflurane on sympathetic activity and  $\delta$  and C somatosympathetic reflexes recorded in renal nerves in dogs (LI) [Pac-Soo et al.], 470

**Headache**

- epidural fibrin glue injection stops persistent postdural puncture headache (CR) [Crul et al.], 576
- postpartum subdural hygroma after epidural analgesia (CR) [Verdú et al.], 867

**Head injury**

- cardiogenic failure after isolated neurologic injury: a report of two cases (CR) [Pousman and Parmley], 1165
- pharmacokinetics of thiopental enantiomers during and following prolonged high-dose therapy (CI) [Cordato et al.], 1693

**Health policy**

- the legal system and patient safety: charting a divergent course: the relationship between malpractice litigation and human errors (EV) [Liang and Cullen], 609

**Heart, electrophysiology**

- effects of halothane and enflurane on ventricular conduction, refractoriness, and wavelength: a concentration-response study in isolated hearts (LI) [Aya et al.], 1873

**Heart arrhythmias. See Heart rhythm and dysrhythmias****Heart dysrhythmias. See Heart rhythm and dysrhythmias****Heart function and disease**

- assessment of the patient with cardiac disease: an anesthesiologist's paradigm (CCC) [Mangano], 1521
- cardiogenic failure after isolated neurologic injury: a report of two cases (CR) [Pousman and Parmley], 1165
- cardioprotective effects of propofol and sevoflurane in ischemic and reperfused rat hearts: role of  $K_{ATP}$  channels and interaction with the sodium-hydrogen exchange inhibitor HOE 642 (cariporide) (LI) [Mathur et al.], 1349
- colchicine inhibits isoflurane-induced preconditioning (LI) [Ismail et al.], 1816
- contractility in humans after coronary artery surgery: echocardiographic assessment with preload-adjusted maximal power (CI) [Schmidt et al.], 58
- effect of mivazolol on perioperative cardiac complications during non-cardiac surgery in patients with coronary heart disease: the European mivazolol trial (EMIT) (CI) [Oliver et al.], 951
- effects of dobutamine on hemodynamics and left ventricular performance after cardiopulmonary bypass in cardiac surgical patients (CI) [Romson et al.], 1318
- effects of halothane and enflurane on ventricular conduction, refractoriness, and wavelength: a concentration-response study in isolated hearts (LI) [Aya et al.], 1873
- endovascular aortic aneurysm repair in a patient with prohibitive cardiopulmonary risk (CR) [Novak et al.], 1542
- interregional differences in the systolic and diastolic response of nonischemic myocardium to remote coronary occlusion (LI) [Marsch et al.], 815
- isoflurane-enhanced recovery of canine stunned myocardium: role for protein kinase C? (LI) [Toller et al.], 713
- length-dependent regulation of left ventricular function in coronary surgery patients (CI) [De Hert et al.], 379
- propofol-induced depression of cultured rat ventricular myocytes is related to the  $M_2$ -acetylcholine receptor-NO-cGMP signaling pathway (LI) [Yamamoto et al.], 1712
- sevoflurane and isoflurane protect the reperfused guinea pig heart by reducing postischemic adhesion of polymorphonuclear neutrophils (LI) [Heindl et al.], 521
- sevoflurane mimics ischemic preconditioning effects on coronary flow and nitric oxide release in isolated hearts (LI) [Novilija et al.], 701
- sevoflurane reduces myocardial infarct size and decreases the time threshold for ischemic preconditioning in dogs (LI) [Toller et al.], 1437
- signal-averaged P-wave duration does not predict atrial fibrillation after thoracic surgery (CI) [Amar et al.], 16

- sildenafil ameliorates effects of inhaled nitric oxide withdrawal (CR) [Atz and Wessel], 307

**Heart rate variability**

- changes in electroencephalogram and autonomic cardiovascular activity during induction of anesthesia with sevoflurane compared with halothane in children (CI) [Constant et al.], 1604

**Heart rhythm and dysrhythmias**

- effects of halothane and enflurane on ventricular conduction, refractoriness, and wavelength: a concentration-response study in isolated hearts (LI) [Aya et al.], 1873
- life-threatening ventricular dysrhythmias with inadvertent asynchronous temporary pacing after cardiac surgery (CR) [Preisman and Cheng], 880
- signal-averaged P-wave duration does not predict atrial fibrillation after thoracic surgery (CI) [Amar et al.], 16

**Heart transplantation**

- systolic anterior motion of the anterior mitral leaflet after heart transplantation (CR) [Chatel et al.], 1535

**Heart valve**

- the case of the missing fragment: detection and retrieval of a portion of broken valve as it was ejected from the heart (CR) [Michelsen and Shanewise], 560

**Hemodilution**

- extreme intraoperative blood loss and hemodilution in a Jehovah's Witness: new aspects in postoperative management (CR) [Neff et al.], 1949
- hemodilution during venous gas embolization improves gas exchange, without altering  $V_A-Q$  or pulmonary blood flow distributions (LI) [Deem et al.], 1861
- perflubron emulsion delays blood transfusions in orthopedic surgery (CI) [Spahn et al.], 1195
- perfluorochemical "blood substitutes": indications for an oxygen-carrying colloid (EV) [Tremper], 1185
- a prospective randomized comparison of three blood conservation strategies for radical prostatectomy (CI) [Monk et al.], 24

**Hemodynamics. See Circulatory physiology and hemodynamics****Hemoglobin desaturation**

- preoxygenation: best method for both efficacy and efficiency? (EV) [Benumof], 603

**Hemorrhagic shock. See Shock and resuscitation****Hemostasis. See Blood coagulation****Heparin**

- anticoagulation monitoring during cardiac surgery: a review of current and emerging techniques (RA) [Despotis et al.], 1122
- epidural catheter removal before unanticipated anticoagulation: the pharmacy fail-safe (CO) [Keegan and Horlocker], 328
- preoperative use of enoxaparin and tirofiban: possible association with increased bleeding postbypass (CR) [Skubas et al.], 869

**Hetastarch and Pentastarch**

- extreme intraoperative blood loss and hemodilution in a Jehovah's Witness: new aspects in postoperative management (CR) [Neff et al.], 1949

**Histamine. See Allergy and histamine****History**

- Livingston, Pain and Suffering (EM) [Spillane], 1971
- pain: the past, present, and future of anesthesiology? (SA) [Cousins], 538
- the three axis alignment theory and the "sniffing position": perpetuation of an anatomic myth? (CO) [Adnet et al.], 1964

**HOE 642. See Cariporide****Hyperbaric oxygen**

- failure of a patient-controlled analgesia pump in a hyperbaric environment (CR) [Sánchez-Guijo et al.], 1540

**Hypertension and antihypertensives**

- blood pressure control with fenoldopam during excision of a pheochromocytoma (CR) [Cooper and Mihm], 558

- effect of isoflurane on in situ vascular smooth muscle transmembrane potential in spontaneous hypertension (LI) [Stekiel et al.], 207
- Hyperthermia**  
noncardiogenic pulmonary edema and rhabdomyolysis after protamine administration in a patient with unrecognized McArdule's disease (CR) [Lobato et al.], 303
- Hypotension**  
anesthetic management of the elderly: measuring function beyond the immediate perioperative horizon (EV) [Raja and Haythornthwaite], 909  
randomized trial of hypotensive epidural anesthesia in older adults (CI) [Williams-Russo et al.], 926
- Hypothermia**  
deep hypothermia and rewarming alters glutamate levels and glycogen content in cultured astrocytes (LI) [Bissonnette et al.], 1763  
hypothermia in barbiturate-anesthetized rats suppresses natural killer cell activity and compromises resistance to tumor metastasis: a role for adrenergic mechanisms (LI) [Ben-Eliyahu et al.], 732  
shivering complicating the treatment of neurologically impaired surgical and intensive care unit patients (CR) [Keegan et al.], 874
- Hypoxia**  
effects of hypoxia-reoxygenation on microvascular endothelial function in the rat hippocampal slice (LI) [Staunton et al.], 1462  
overexpression of bcl-x<sub>i</sub> protects astrocytes from glucose deprivation and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036  
preoxygenation: best method for both efficacy and efficiency? (EV) [Benumof], 603  
vaporized perfluorocarbon: taking the "liquid" out of liquid ventilation (EV) [Warner], 340
- Hypoxic pulmonary vasoconstriction**  
ketamine preserves and propofol potentiates hypoxic pulmonary vasoconstriction compared with the conscious state in chronically instrumented dogs (LI) [Nakayama and Murray], 760
- I**
- Ibuprofen**  
evaluation of interaction between gabapentin and ibuprofen on the formalin test in rats (LI) [Yoon and Yaksh], 1006  
spinal antinociceptive effect of epidural nonsteroidal antiinflammatory drugs on nitric oxide-induced hyperalgesia in rats (LI) [Masue et al.], 198
- Imaging and radiology**  
cervical spine instability and dwarfism: fiberoptic intubations for all (CO), [Auden], 580  
comparable postoperative pulmonary atelectasis in patients given 30% or 80% oxygen during and 2 hours after colon resection (CI) [Akça et al.], 991  
epileptiform discharges during 2 MAC sevoflurane anesthesia in two healthy volunteers (CR) [Kaisti et al.], 1952  
postpartum subdural hygroma after epidural analgesia (CR) [Verdú et al.], 867  
the three axis alignment theory and the "sniffing position": perpetuation of an anatomic myth? (CO) [Adnet et al.], 1964
- Immunology and inflammation**  
cecal ligation and puncture peritonitis model shows decreased nicotinic acetylcholine receptor numbers in rat muscle: immunopathologic mechanisms? (LI) [Tsukagoshi et al.], 448  
exposure to cigarette smoke impairs alveolar macrophage functions during halothane and isoflurane anesthesia in rats (LI) [Kotani et al.], 1823  
immunomodulatory aspects of transfusion: a once and future risk? (CCC) [Klein], 861  
a new twist to myopathy of critical illness (EV) [Martyn and Vincent], 337  
volatile anesthetics augment expression of proinflammatory cytokines in rat alveolar macrophages during mechanical ventilation (LI) [Kotani et al.], 187
- Indomethacin**  
spinal antinociceptive effect of epidural nonsteroidal antiinflammatory drugs on nitric oxide-induced hyperalgesia in rats (LI) [Masue et al.], 198
- Infants. See Pediatric anesthesia**
- Infections and infectious diseases**  
aseptic meningitis after spinal anesthesia in an infant (CR) [Easley et al.], 305  
catastrophic caudal spread of a peritonsillar abscess: a case report (CR) [Manecke et al.], 1956  
growth of *Staphylococcus aureus* in Diprivan and Intralipid: implications on the pathogenesis of infections (LI) [Langevin et al.], 1394  
incidence of spinal epidural abscess after epidural analgesia: a national 1-year survey (SA) [Wang et al.], 1928  
poor antibacterial effect of ropivacaine: comparison with bupivacaine (LR) [Pere et al.], 884
- Inflammation. See Immunology and inflammation**
- Information systems**  
prediction bounds for case scheduling: interpret with caution (CO), [Dexter], 590, [Overdyk and Rust], 589
- Informed consent**  
ethics for non-emergencies (CO), [Cohen], 323, [Rosenfeld and Balser], 323  
randomized trial of informed consent and recruitment for clinical trials in the immediate preoperative period (CI) [Myles et al.], 969
- Infusion pump**  
major ambulatory surgery with continuous regional anesthesia and a disposable infusion pump (CR) [Klein et al.], 563
- Inhalation anesthesia and anesthetics**  
additive contribution of nitrous oxide to sevoflurane minimum alveolar concentration for tracheal intubation in children (CI) [Swan et al.], 667  
Amsorb: a new carbon dioxide absorbent for use in anesthetic breathing systems (LI) [Murray et al.], 1342  
anesthetic doses of sevoflurane to block cardiovascular responses to incision when administered with xenon or nitrous oxide (CI) [Nakata et al.], 369  
cardioprotective effects of propofol and sevoflurane in ischemic and perfused rat hearts: role of K<sub>ATP</sub> channels and interaction with the sodium-hydrogen exchange inhibitor HOE 642 (cariporide) (LI) [Mathur et al.], 1349  
changes in electroencephalogram and autonomic cardiovascular activity during induction of anesthesia with sevoflurane compared with halothane in children (CI) [Constant et al.], 1604  
comparative pharmacodynamic modeling of the electroencephalography-slowing effect of isoflurane, sevoflurane, and desflurane (CI) [Rehberg et al.], 397  
compound A uptake and metabolism to mercapturic acids and 3,3,3-trifluoro-2-fluoromethoxypropanoic acid during low-flow sevoflurane anesthesia: biomarkers for exposure, risk assessment, and interspecies comparison (CI) [Kharasch and Jubert], 1267  
coupling of local cerebral blood flow to local cerebral glucose utilization during isoflurane and sevoflurane anesthesia (CO), [Archer and Pappius], 889  
differential effects of sevoflurane, isoflurane, and halothane on Ca<sup>2+</sup>

- release from the sarcoplasmic reticulum of skeletal muscle (LI) [Kunst et al.], 179
- direct cerebral vasodilatory effects of sevoflurane and isoflurane (CI) [Matta et al.], 677
- effect of isoflurane on in situ vascular smooth muscle transmembrane potential in spontaneous hypertension (LI) [Stekiel et al.], 207
- effects of halothane and enflurane on ventricular conduction, refractoriness, and wavelength: a concentration-response study in isolated hearts (LI) [Aya et al.], 1873
- effects of halothane on synaptic neurotransmission to medullary expiratory neurons in the ventral respiratory group of dogs (LI) [Stuth et al.], 804
- epileptiform discharges during 2 MAC sevoflurane anesthesia in two healthy volunteers (CR) [Kaisti et al.], 1952
- epileptiform electroencephalogram during mask induction of anesthesia with sevoflurane (CI) [Yli-Hankala et al.], 1596
- exposure to cigarette smoke impairs alveolar macrophage functions during halothane and isoflurane anesthesia in rats (LI) [Kotani et al.], 1823
- forty-hertz midlatency auditory evoked potential activity predicts wakeful response during desflurane and propofol anesthesia in volunteers (CI) [Dutton et al.], 1209
- halothane and isoflurane increase spontaneous but reduce the N-methyl-D-aspartate-evoked dopamine release in rat striatal slices: evidence for direct presynaptic effects (LI) [Keita et al.], 1788
- human neuronal nicotinic acetylcholine receptors expressed in *Xenopus* oocytes predict efficacy of halogenated compounds that disobey the Meyer-Overton rule (LI) [Cardoso et al.], 1370
- isoflurane blunts electroencephalographic and thalamic-reticular formation responses to noxious stimulation in goats (LI) [Antognini and Carstens.], 5770
- isoflurane-enhanced recovery of canine stunned myocardium: role for protein kinase C? (LI) [Toller et al.], 713
- local coupling of cerebral blood flow to cerebral glucose metabolism during inhalational anesthesia in rats: desflurane versus isoflurane (LI) [Lenz et al.], 1720
- potential errors in the measurement of anesthetic partial pressure in blood (CR) [Lockwood et al.], 1550
- putting the brakes on anesthetic breakdown (EV) [Kharasch.], 1192
- quantitative and qualitative effects of isoflurane on movement occurring after noxious stimulation (LI) [Antognini et al.], 1064
- recovery profile, costs, and patient satisfaction with propofol and sevoflurane for fast-track office-based anesthesia (EC) [Tang et al.], 253
- relative contribution of skin and core temperatures to vasoconstriction and shivering thresholds during isoflurane anesthesia (CI) [Lenhardt et al.], 422
- on the relevance of "clinically relevant concentrations" of inhaled anesthetics in in vitro experiments (SA) [Eckenhoff and Johansson.], 856
- sevoflurane increases lumbar cerebrospinal fluid pressure in normocapnic patients undergoing transsphenoidal hypophysectomy (CI) [Talke et al.], 127
- sevoflurane and isoflurane protect the reperfused guinea pig heart by reducing posts ischemic adhesion of polymorphonuclear neutrophils (LI) [Heindl et al.], 521
- sevoflurane mimics ischemic preconditioning effects on coronary flow and nitric oxide release in isolated hearts (LI) [Novolija et al.], 701
- sevoflurane reduces myocardial infarct size and decreases the time threshold for ischemic preconditioning in dogs (LI) [Toller et al.], 1437
- a simplified risk score for predicting postoperative nausea and vomiting: conclusions from cross-validations between two centers (CI) [Apfel et al.], 693
- specific actions of halothane, isoflurane, and desflurane on sympathetic activity and A $\delta$  and C somatosympathetic reflexes recorded in renal nerves in dogs (LI) [Pac-Soo et al.], 470
- thermoregulatory thresholds for vasoconstriction in patients anesthetized with various 1-minimum alveolar concentration combinations of xenon, nitrous oxide, and isoflurane (CI) [Goto et al.], 626
- volatile anesthetics augment expression of proinflammatory cytokines in rat alveolar macrophages during mechanical ventilation (LI) [Kotani et al.], 187
- Innovative application**
- a simple and handy way to affix a safety pin to an earpiece tubing (CO) [Yamashita and Osaka.], 1561
- vaporized perfluorocarbon: taking the "liquid" out of liquid ventilation (EV) [Warner.], 340
- vaporized perfluorocarbon improves oxygenation and pulmonary function in an ovine model of acute respiratory distress syndrome (LI) [Bleyl et al.], 461
- Interferon**
- volatile anesthetics augment expression of proinflammatory cytokines in rat alveolar macrophages during mechanical ventilation (LI) [Kotani et al.], 187
- Interleukins**
- exposure to cigarette smoke impairs alveolar macrophage functions during halothane and isoflurane anesthesia in rats (LI) [Kotani et al.], 1823
- volatile anesthetics augment expression of proinflammatory cytokines in rat alveolar macrophages during mechanical ventilation (LI) [Kotani et al.], 187
- Internet. See Web site reviews**
- Intracellular calcium. See Calcium and calcium channels**
- Intracranial pressure**
- sevoflurane increases lumbar cerebrospinal fluid pressure in normocapnic patients undergoing transsphenoidal hypophysectomy (CI) [Talke et al.], 127
- Intralipid**
- growth of *Staphylococcus aureus* in Diprivan and Intralipid: implications on the pathogenesis of infections (LI) [Langevin et al.], 1394
- Intrathecal anesthesia**
- analgesic interaction between intrathecal midazolam and glutamate receptor antagonists on thermal-induced pain in rats (LI) [Nishiyama et al.], 531
- combined spinal-epidural analgesia in obstetrics (CCC) [Eisenach.], 299, [erratum] 906
- intrathecal bupivacaine in humans: influence of volume and baricity of solutions (CI) [Malinovsky et al.], 1260
- sex differences in cholinergic analgesia I: a supplemental nicotinic mechanism in normal females (LI) [Chiari et al.], 1447
- sex differences in cholinergic analgesia II: differing mechanisms in two models of allodynia (LI) [Lavand'homme and Eisenach.], 1455
- Intravenous anesthesia and anesthetics**
- cardioprotective effects of propofol and sevoflurane in ischemic and reperfused rat hearts: role of  $K_{ATP}$  channels and interaction with the sodium-hydrogen exchange inhibitor HOE 642 (carriporide) (LI) [Mathur et al.], 1349
- contractility in humans after coronary artery surgery: echocardiographic assessment with preload-adjusted maximal power (CI) [Schmidt et al.], 58
- different actions of general anesthetics on the firing patterns of neocortical neurons mediated by the GABA $_A$  receptor (LI) [Antkowiak.], 500
- effects of propofol and remifentanyl on phrenic nerve activity and

- nociceptive cardiovascular responses in rabbits (LI) [Ma et al.], 1470
- first-pass lung uptake and pulmonary clearance of propofol: assessment with a recirculatory indocyanine green pharmacokinetic model (LI) [Kuipers et al.], 1780
- forty-hertz midlatency auditory evoked potential activity predicts wakeful response during desflurane and propofol anesthesia in volunteers (CI) [Dutton et al.], 1209
- growth of *Staphylococcus aureus* in Diprivan and Intralipid: implications on the pathogenesis of infections (LI) [Langevin et al.], 1394
- inhibitory effects of propofol on acetylcholine-induced endothelium-dependent relaxation and prostacyclin synthesis in rabbit mesenteric resistance arteries (LI) [Yamashita et al.], 1080
- interaction of intravenous anesthetics with human neuronal potassium currents in relation to clinical concentrations (LI) [Friedrich and Urban], 1853
- intravenous regional anesthesia using lidocaine and clonidine (CI) [Reuben et al.], 654
- ketamine distribution described by a recirculatory pharmacokinetic model is not stereoselective (LI) [Henthorn et al.], 1733
- ketamine preserves and propofol potentiates hypoxic pulmonary vasoconstriction compared with the conscious state in chronically instrumented dogs (LI) [Nakayama and Murray], 760
- management of bladder function after outpatient surgery (CI) [Pavlin et al.], 42
- the mechanism of inhibitory actions of propofol on rat supraoptic neurons (LI) [Inoue et al.], 167
- mechanisms underlying the inhibitory effect of propofol on the contraction of canine airway smooth muscle (LI) [Lin et al.], 750
- propofol has both enhancing and suppressing effects on human platelet aggregation in vitro (LI) [Hirakata et al.], 1361
- propofol-induced depression of cultured rat ventricular myocytes is related to the  $M_2$ -acetylcholine receptor-NO-cGMP signaling pathway (LI) [Yamamoto et al.], 1712
- recovery profile, costs, and patient satisfaction with propofol and sevoflurane for fast-track office-based anesthesia (EC) [Tang et al.], 253
- a reliable diagnosis of porphyria should precede any conclusion concerning the safety of a drug in porphyria (CO), [Asirvatham], 584
- strict temperature control has no effect on injection pain with propofol (CO), [Ozturk et al.], 592, [Uda et al.], 591
- suppression of central nervous system sodium channels by propofol (LI) [Rehberg and Duch], 512
- Intubation.** *See also* Airway management; Endotracheal intubation
- comparison of the intubation conditions provided by rapacuronium (ORG 9487) or succinylcholine in humans during anesthesia with fentanyl and propofol (CI) [Fleming et al.], 1311
- the esophageal detector device is unreliable when the stomach has been ventilated (CR) [Andres and Langenstein], 566
- fast tracking into the new millennium: an evolving paradigm (EV) [London et al.], 911
- new insights into the pathomechanism of postintubation arytenoid subluxation (CI) [Paulsen et al.], 659
- pretreatment intravenous lidocaine for intubation of the asthmatic patient: more data are needed (CO), [Groeben and Peters], 319, [Zemenick], 318
- simple modification of the Ovassapian fiberoptic intubating airway (CO) [Aoyama et al.], 897
- unanticipated difficult intubation as a result of an asymptomatic vallecular cyst (CR) [Kamble et al.], 872
- use of the Endotrol endotracheal tube and a light wand for blind nasotracheal intubation (CO), [Asai], 1557, [Iseki and Murakawa], 1557
- Intubation, fiberoptic**
- cervical spine instability and dwarfism: fiberoptic intubations for all (CO), [Auden], 580, [Redl], 580
- oro- and nasogastric tube passage in intubated patients: fiberoptic description of where they go at the laryngeal level and how to make them enter the esophagus (CI) [Ozer and Benumof], 137
- Ions and ion channels.** *See also* Calcium and calcium channels; Potassium and potassium channels; Sodium and sodium channels
- the alkyl chain dependence of the effect of normal alcohols on agonist-induced nicotinic acetylcholine receptor desensitization kinetics (LI) [Raines and Zachariah], 222
- cardioprotective effects of propofol and sevoflurane in ischemic and reperfused rat hearts: role of  $K_{ATP}$  channels and interaction with the sodium-hydrogen exchange inhibitor HOE 642 (cariporide) (LI) [Mathur et al.], 1349
- interaction of intravenous anesthetics with human neuronal potassium currents in relation to clinical concentrations (LI) [Friedrich and Urban], 1853
- the mechanism of inhibitory actions of propofol on rat supraoptic neurons (LI) [Inoue et al.], 167
- meperidine and lidocaine block of recombinant voltage-dependent  $Na^+$  channels: evidence that meperidine is a local anesthetic (LI) [Wagner et al.], 1481
- stereoselectivity of bupivacaine in local anesthetic-sensitive ion channels of peripheral nerve (LI) [Nau et al.], 786
- suppression of central nervous system sodium channels by propofol (LI) [Rehberg and Duch], 512
- Iron**
- overexpression of bcl- $x_L$  protects astrocytes from glucose deprivation and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036
- Ischemia**
- overexpression of bcl- $x_L$  protects astrocytes from glucose deprivation and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036
- tourniquet constriction exacerbates hyperalgesia-related pain induced by intradermal capsaicin injection (CI) [Byas-Smith et al.], 617
- Ischemia-reperfusion injury**
- cardioprotective effects of propofol and sevoflurane in ischemic and reperfused rat hearts: role of  $K_{ATP}$  channels and interaction with the sodium-hydrogen exchange inhibitor HOE 642 (cariporide) (LI) [Mathur et al.], 1349
- colchicine inhibits isoflurane-induced preconditioning (LI) [Ismacil et al.], 1816
- effects of hypoxia-reoxygenation on microvascular endothelial function in the rat hippocampal slice (LI) [Staunton et al.], 1462
- nitecapone reduces cardiac neutrophil accumulation in clinical open heart surgery (CI) [Pesonen et al.], 355
- sevoflurane and isoflurane protect the reperfused guinea pig heart by reducing postischemic adhesion of polymorphonuclear neutrophils (LI) [Heindl et al.], 521
- Isobolographic analysis**
- evaluation of interaction between gabapentin and ibuprofen on the formalin test in rats (LI) [Yoon and Yaksh], 1006
- Isoflurane**
- comparative pharmacodynamic modeling of the electroencephalography-slowing effect of isoflurane, sevoflurane, and desflurane (CI) [Rehberg et al.], 397
- coupling of local cerebral blood flow to local cerebral glucose utilization during isoflurane and sevoflurane anesthesia (CO), [Archer and Pappius], 889, [Lenz et al.], 890

- differential effects of sevoflurane, isoflurane, and halothane on  $\text{Ca}^{2+}$  release from the sarcoplasmic reticulum of skeletal muscle (LI) [Kunst et al.], 179
- direct cerebral vasodilatory effects of sevoflurane and isoflurane (CI) [Matta et al.], 677
- effect of isoflurane on in situ vascular smooth muscle transmembrane potential in spontaneous hypertension (LI) [Stekiel et al.], 207
- exposure to cigarette smoke impairs alveolar macrophage functions during halothane and isoflurane anesthesia in rats (LI) [Kotani et al.], 1823
- halothane and isoflurane increase spontaneous but reduce the N-methyl-D-aspartate-evoked dopamine release in rat striatal slices: evidence for direct presynaptic effects (LI) [Keita et al.], 1788
- human neuronal nicotinic acetylcholine receptors expressed in *Xenopus* oocytes predict efficacy of halogenated compounds that disobey the Meyer-Overton rule (LI) [Cardoso et al.], 1370
- isoflurane blunts electroencephalographic and thalamic-reticular formation responses to noxious stimulation in goats (LI) [Antognini and Carstens], 1770
- isoflurane-enhanced recovery of canine stunned myocardium: role for protein kinase C? (LI) [Toller et al.], 713
- local coupling of cerebral blood flow to cerebral glucose metabolism during inhalational anesthesia in rats: desflurane versus isoflurane (LI) [Lenz et al.], 1720
- quantitative and qualitative effects of isoflurane on movement occurring after noxious stimulation (LI) [Antognini et al.], 1064
- relative contribution of skin and core temperatures to vasoconstriction and shivering thresholds during isoflurane anesthesia (CI) [Lenhardt et al.], 422
- sevoflurane and isoflurane protect the reperfused guinea pig heart by reducing postischemic adhesion of polymorphonuclear neutrophils (LI) [Heindl et al.], 521
- specific actions of halothane, isoflurane, and desflurane on sympathetic activity and A $\delta$  and C somatosympathetic reflexes recorded in renal nerves in dogs (LI) [Pac-Soo et al.], 470
- thermoregulatory thresholds for vasoconstriction in patients anesthetized with various 1-minimum alveolar concentration combinations of xenon, nitrous oxide, and isoflurane (CI) [Goto et al.], 626

## J

- Joint replacement surgery.** *See also Orthopedic surgery*
- cerebral microembolism diagnosed by transcranial Doppler during total knee arthroplasty: correlation with transesophageal echocardiography (CI) [Sulek et al.], 672

## K

**Ketamine and phencyclidine**

- different actions of general anesthetics on the firing patterns of neocortical neurons mediated by the GABA $_A$  receptor (LI) [Antkowiak], 500
- interaction of intravenous anesthetics with human neuronal potassium currents in relation to clinical concentrations (LI) [Friedrich and Urban], 1853
- ketamine distribution described by a recirculatory pharmacokinetic model is not stereoselective (LI) [Henthorn et al.], 1733
- ketamine preserves and propofol potentiates hypoxic pulmonary vasoconstriction compared with the conscious state in chronically instrumented dogs (LI) [Nakayama and Murray], 760

- tooth pulp- and facial hair mechanoreceptor-evoked responses of trigeminal sensory neurons are attenuated during ketamine anesthesia (LI) [Cairns et al.], 1025

**Kidney function and disease**

- blood pressure control with fenoldopam during excision of a pheochromocytoma (CR) [Cooper and Mihm], 558
- compound A uptake and metabolism to mercapturic acids and 3,3,3-trifluoro-2-fluoromethoxypropanoic acid during low-flow sevoflurane anesthesia: biomarkers for exposure, risk assessment, and interspecies comparison (CI) [Kharasch and Jubert], 1267
- rhabdomyolysis after abdominal surgery in the hyperlordotic position enforced by pneumatic support (CR) [Uratsuji et al.], 310

## L

**Labeling**

- "label" versus "labeling" of a drug: there is a significant difference (CO), [Landow], 1557, [Moore], 1556

**Labor and delivery.** *See also Cesarean delivery; Obstetric anesthesia*

- analgesic and hemodynamic effects of intrathecal clonidine as the sole analgesic agent during first stage of labor: a dose-response study (CI) [Chiari et al.], 388
- effect of combined spinal-epidural ambulatory labor analgesia on balance (CI) [Pickering et al.], 436
- intrathecal neostigmine and sufentanil for early labor analgesia (CI) [Nelson et al.], 1293
- is combined spinal-epidural analgesia associated with more rapid cervical dilation in nulliparous patients when compared with conventional epidural analgesia? (CI) [Tsen et al.], 920
- lumbar sympathetic blocks speed early and second stage induced labor in nulliparous women (CI) [Leighton et al.], 90:1039, [erratum] 602
- obstetric anesthesia: what have you done for us lately? (EV) [Eisenach], 907

**Lactic acid**

- intestinal luminal microdialysis: a new approach to assess gut mucosal ischemia (LI) [Tenhunen et al.], 1807

**Laparoscopy**

- diaphragmatic activity after laparoscopic cholecystectomy (CI) [Sharma et al.], 406
- life-threatening bilateral pneumothorax caused by misconnection of the laser lens cooling system during gynecologic laparoscopy (CO) [Gueret et al.], 1179

**Laryngeal function and disease**

- airway injury during anesthesia: a closed claims analysis (CI) [Domino et al.], 1703
- case of Cowden's disease that caused airway obstruction during induction of anesthesia (CR) [Omote et al.], 1537
- the esophageal detector device is unreliable when the stomach has been ventilated (CR) [Andres and Langenstein], 566
- laryngospasm treatment—an explanation (CO), [Johnstone], 581, [Larson], 582
- new insights into the pathomechanism of postintubation arytenoid subluxation (CI) [Paulsen et al.], 659
- the onset/offset profiles of rapacuronium and succinylcholine are not identical (CO) [Kopman], 1554
- pharyngeal mucosal pressure and perfusion: a fiberoptic evaluation of the posterior pharynx in anesthetized adult patients with a modified cuffed oropharyngeal airway (CI) [Brimacombe et al.], 1661
- supraglottic obstruction versus true laryngospasm: the best treatment (CO) [Rajan], 581
- unanticipated difficult intubation as a result of an asymptomatic vallecular cyst (CR) [Kamble et al.], 872

**Laryngeal mask airway and COPA**

- the esophageal detector device is unreliable when the stomach has been ventilated (CR) [Andres and Langenstein], 566
- Fastrach uses a low-volume, high-pressure cuff for the endotracheal tube system (CO), [Wiesel and Warm], 592
- how to perform differential lung ventilation in pediatric cases? (CO) [Tsujimoto et al.], 327
- inflation of the endotracheal tube cuff in the pharynx for ventilation of paralyzed patients with unanticipated difficult airway (CO) [Panadero et al.], 1178
- intubation of a child with a difficult airway using a laryngeal mask airway and a guidewire and jet stylet (CO) [Nitahara et al.], 330
- pharyngeal mucosal pressure and perfusion: a fiberoptic evaluation of the posterior pharynx in anesthetized adult patients with a modified cuffed oropharyngeal airway (CI) [Brimacombe et al.], 1661
- a thyroid shield can correct a laryngeal mask airway air leak (CO) [Hall], 1558
- use of the laryngeal mask for exchange of orotracheal tubes (CR) [Asai], 1167

**Laryngoscopy**

- airway exchange catheters: simple concept, potentially great danger (EV) [Benumof], 342

**Laryngoscopy, direct**

- additive contribution of nitrous oxide to sevoflurane minimum alveolar concentration for tracheal intubation in children (CI) [Swan et al.], 667
- airway injury during anesthesia: a closed claims analysis (CI) [Domino et al.], 1703
- comparison of the intubation conditions provided by rapacurium (ORG 9487) or succinylcholine in humans during anesthesia with fentanyl and propofol (CI) [Fleming et al.], 1311
- evaluation of neuromuscular and cardiovascular effects of two doses of rapacurium (ORG 9487) versus mivacurium and succinylcholine (CI) [Miguel et al.], 1648
- evaluation of tracheal intubation difficulty in patients with cervical spine immobilization: fiberoptic (WuScope) versus conventional laryngoscopy (CI) [Smith et al.], 1253
- intramuscular rapacurium in infants and children: dose-ranging and tracheal intubating conditions (CI) [Reynolds et al.], 1285
- rapid tracheal intubation with rocuronium: a probability approach to determining dose (CI) [Kirkegaard-Nielsen et al.], 131
- the three axis alignment theory and the "sniffing position": perpetuation of an anatomic myth? (CO) [Adnet et al.], 1964

**Laryngoscopy, fiberoptic**

- airway injury during anesthesia: a closed claims analysis (CI) [Domino et al.], 1703
- clinical assessment of a plastic optical fiber stylet for human tracheal intubation (CI) [Gravenstein et al.], 648
- controlled intermittent aerosolization of lidocaine for airway anesthesia (CO) [Balatbat et al.], 596
- efficiency of a new fiberoptic stylet scope in tracheal intubation (CI) [Kitamura et al.], 1628
- evaluation of tracheal intubation difficulty in patients with cervical spine immobilization: fiberoptic (WuScope) versus conventional laryngoscopy (CI) [Smith et al.], 1253
- intubation of a child with a difficult airway using a laryngeal mask airway and a guidewire and jet stylet (CO) [Nitahara et al.], 330
- oro- and nasogastric tube passage in intubated patients: fiberoptic description of where they go at the laryngeal level and how to make them enter the esophagus (CI) [Ozer and Benumof], 137
- simple modification of the Ovassapian fiberoptic intubating airway (CO) [Aoyama et al.], 897

**Law. See Medicolegal issues****Lazarus phenomenon**

- recovery after discontinuation of cardiopulmonary resuscitation ("Lazarus phenomenon") (CO) [Maleck and Piper], 584
- spontaneous recovery after discontinuation of cardiopulmonary resuscitation (CO), [Frolich], 586, [MacGillivray], 585

**Leukocytes and lymphocytes**

- exposure to cigarette smoke impairs alveolar macrophage functions during halothane and isoflurane anesthesia in rats (LI) [Kotani et al.], 1823
- hypothermia in barbiturate-anesthetized rats suppresses natural killer cell activity and compromises resistance to tumor metastasis: a role for adrenergic mechanisms (LI) [Ben-Eliyahu et al.], 732
- nitecapone reduces cardiac neutrophil accumulation in clinical open heart surgery (CI) [Pesonen et al.], 355
- pancreatitis-associated protein protects the lung from leukocyte-induced injury (LI) [Heller et al.], 1408
- sevoflurane and isoflurane protect the reperfused guinea pig heart by reducing postschismic adhesion of polymorphonuclear neutrophils (LI) [Heindl et al.], 521
- transfusion-related lung injury with leukopenic reaction caused by fresh frozen plasma containing anti-NB1 (CR) [Leger et al.], 1529

**Lidocaine**

- controlled intermittent aerosolization of lidocaine for airway anesthesia (CO) [Balatbat et al.], 596
- effect of epinephrine on lidocaine clearance in vivo: a microdialysis study in humans (CI) [Bernards and Kopacz], 962
- intravenous regional anesthesia using lidocaine and clonidine (CI) [Reuben et al.], 654
- meperidine and lidocaine block of recombinant voltage-dependent Na<sup>+</sup> channels: evidence that meperidine is a local anesthetic (LI) [Wagner et al.], 1481
- pretreatment intravenous lidocaine for intubation of the asthmatic patient: more data are needed (CO), [Zemenick], 318

**Lingual tonsil**

- case of Cowden's disease that caused airway obstruction during induction of anesthesia (CR) [Omote et al.], 1537

**Liver function and disease**

- pharmacokinetics and pharmacodynamics of rapacurium in patients with cirrhosis (CI) [Duvaldestin et al.], 1305
- photosensitivity and perioperative polyneuropathy complicating orthotopic liver transplantation in a patient with erythropoietic protoporphyria (CR) [Nguyen et al.], 1173

**Liver transplantation**

- photosensitivity and perioperative polyneuropathy complicating orthotopic liver transplantation in a patient with erythropoietic protoporphyria (CR) [Nguyen et al.], 1173
- total blood transfusion and mortality after orthotopic liver transplantation (CO) [Schroeder et al.], 329
- venous access for pediatric liver transplantation (CO), [Hammer and Krane], 322, [Henderson], 323, [Henderson], 323

**Local anesthesia and anesthetics. See also Regional anesthesia and anesthetics**

- caudal block in children: ropivacaine compared with bupivacaine (CI) [Khalil et al.], 1279
- controlled intermittent aerosolization of lidocaine for airway anesthesia (CO) [Balatbat et al.], 596
- dibucaine and tetracaine inhibit the activation of mitogen-activated protein kinase mediated by L-type calcium channels in PC12 cells (LI) [Kansha et al.], 1798
- does epidural anesthesia have general anesthetic effects? a prospective, randomized, double-blind, placebo-controlled trial (CI) [Hodgson et al.], 1687

- effect of epinephrine on lidocaine clearance in vivo: a microdialysis study in humans (CI) [Bernards and Kopacz], 962
- effects of perioperative analgesic technique on the surgical outcome and duration of rehabilitation after major knee surgery (CI) [Capdevila et al.], 8
- intrathecal bupivacaine in humans: influence of volume and baricity of solutions (CI) [Malinovsky et al.], 1260
- intrathecal ropivacaine for ambulatory surgery: a comparison between intrathecal bupivacaine and intrathecal ropivacaine for knee arthroscopy (CI) [Gautier et al.], 1239
- intravenous regional anesthesia using lidocaine and clonidine (CI) [Reuben et al.], 654
- local anesthetics inhibit muscarinic receptor-mediated activation of extracellular signal-regulated kinases in rat pheochromocytoma PC12 cells (LI) [Tan et al.], 1014
- meperidine and lidocaine block of recombinant voltage-dependent  $\text{Na}^+$  channels: evidence that meperidine is a local anesthetic (LI) [Wagner et al.], 1481
- poor antibacterial effect of ropivacaine: comparison with bupivacaine (LR) [Pere et al.], 884
- regional anesthesia and postoperative pain management: long-term benefits from a short-term intervention (EV) [Todd and Brown], 1
- reverse arterial blood flow mediated local anesthetic central nervous system toxicity during axillary brachial plexus block (CO) [Dominguez and Garbaccio], 901
- stereoselectivity of bupivacaine in local anesthetic-sensitive ion channels of peripheral nerve (LI) [Nau et al.], 786
- Low back pain**
- effect of the duration of electrical stimulation on the analgesic response in patients with low back pain (CI) [Hamza et al.], 1622
- treatment of lumbosacral radiculopathy with epidural steroids (CCC) [Abram], 1937
- Lung, alveolar macrophages**
- different ventilation strategies affect lung function but do not increase tumor necrosis factor- $\alpha$  and prostacyclin production in lavaged rat lungs in vivo (LI) [Verbrugge et al.], 1834
- effects of exogenous surfactant on acute lung injury induced by intratracheal instillation of infant formula or human breast milk in rabbits (LI) [Nishina et al.], 240
- exposure to cigarette smoke impairs alveolar macrophage functions during halothane and isoflurane anesthesia in rats (LI) [Kotani et al.], 1823
- volatile anesthetics augment expression of proinflammatory cytokines in rat alveolar macrophages during mechanical ventilation (LI) [Kotani et al.], 187
- Lung, blood flow**
- circulatory failure after anesthesia induction in a patient with severe primary pulmonary hypertension (CR) [Höhn et al.], 1943
- congenital NOS2 deficiency protects mice from LPS-induced hyporesponsiveness to inhaled nitric oxide (LI) [Weimann et al.], 1744
- first-pass lung uptake and pulmonary clearance of propofol: assessment with a recirculatory indocyanine green pharmacokinetic model (LI) [Kuipers et al.], 1780
- hemodilution during venous gas embolization improves gas exchange, without altering  $\dot{V}_A\text{-Q}$  or pulmonary blood flow distributions (LI) [Deem et al.], 1861
- inhibition of nitric oxide synthase prevents hyporesponsiveness to inhaled nitric oxide in lungs from endotoxin-challenged rats (LI) [Holzmann et al.], 215
- ketamine preserves and propofol potentiates hypoxic pulmonary vasoconstriction compared with the conscious state in chronically instrumented dogs (LI) [Nakayama and Murray], 760
- pancreatitis-associated protein protects the lung from leukocyte-induced injury (LI) [Heller et al.], 1408
- selective iNOS inhibition attenuates acetylcholine- and bradykinin-induced vasoconstriction in lipopolysaccharide-exposed rat lungs (LI) [Fischer et al.], 1724
- Lung, gas exchange**
- combining partial liquid ventilation and prone position in experimental acute lung injury (LI) [Max et al.], 796
- comparable postoperative pulmonary atelectasis in patients given 30% or 80% oxygen during and 2 hours after colon resection (CI) [Akca et al.], 991
- hemodilution during venous gas embolization improves gas exchange, without altering  $\dot{V}_A\text{-Q}$  or pulmonary blood flow distributions (LI) [Deem et al.], 1861
- inhibition of nitric oxide synthase prevents hyporesponsiveness to inhaled nitric oxide in lungs from endotoxin-challenged rats (LI) [Holzmann et al.], 215
- positive end-expiratory pressure improves respiratory function in obese but not in normal subjects during anesthesia and paralysis (CI) [Pelosi et al.], 1221
- pulmonary aspiration of a milk/cream mixture (CR) [Brodsky et al.], 1533
- the role of tumor necrosis factor- $\alpha$  in the pathogenesis of aspiration pneumonitis in rats (LI) [Davidson et al.], 486
- the use of side-stream spirometry to assess air leak during and after lung volume reduction surgery (CR) [Robinson], 571
- vaporized perfluorocarbon: taking the "liquid" out of liquid ventilation (EV) [Warner], 340
- vaporized perfluorocarbon improves oxygenation and pulmonary function in an ovine model of acute respiratory distress syndrome (LI) [Bleyl et al.], 461
- Lung, injury. See Lung function and disease**
- Lung, mechanics**
- effects of halothane on synaptic neurotransmission to medullary expiratory neurons in the ventral respiratory group of dogs (LI) [Stuth et al.], 804
- respiratory mechanics during xenon anesthesia in pigs: comparison with nitrous oxide (LI) [Calzia et al.], 1378
- vaporized perfluorocarbon improves oxygenation and pulmonary function in an ovine model of acute respiratory distress syndrome (LI) [Bleyl et al.], 461
- Lung, pulmonary edema**
- anesthetic management of the parturient with systemic lupus erythematosus, pulmonary hypertension, and pulmonary edema (CR) [Cuenco et al.], 568
- delayed-onset epinephrine-induced pulmonary edema (CR) [Liu et al.], 1169
- effects of exogenous surfactant on acute lung injury induced by intratracheal instillation of infant formula or human breast milk in rabbits (LI) [Nishina et al.], 240
- noncardiogenic pulmonary edema and rhabdomyolysis after protamine administration in a patient with unrecognized McArde's disease (CR) [Lobato et al.], 303
- Lung, respiratory control**
- effects of halothane on synaptic neurotransmission to medullary expiratory neurons in the ventral respiratory group of dogs (LI) [Stuth et al.], 804
- effects of propofol and remifentanyl on phrenic nerve activity and nociceptive cardiovascular responses in rabbits (LI) [Ma et al.], 1470
- experimental pain augments experimental dyspnea, but not vice versa in human volunteers (CI) [Nishino et al.], 1633
- pharmacokinetic-pharmacodynamic modeling of the respiratory depressant effect of alfentanil (CI) [Bouillon et al.], 144
- Lung, respiratory failure**
- combining partial liquid ventilation and prone position in experimental acute lung injury (LI) [Max et al.], 796
- controlled airway pressure therapy, nitric oxide inhalation, prone

## SUBJECT INDEX TO VOLUME 91

## Lung, respiratory failure—Lung function and disease

- position, and extracorporeal membrane oxygenation (ECMO) as components of an integrated approach to ARDS (CI) [Ullrich et al.], 1577
- effects of exogenous surfactant on acute lung injury induced by intratracheal instillation of infant formula or human breast milk in rabbits (LI) [Nishina et al.], 240
- inhaled nitric oxide: basic biology and clinical applications (MI) [Steudel et al.], 1090
- inhibition of nitric oxide synthase prevents hyporesponsiveness to inhaled nitric oxide in lungs from endotoxin-challenged rats (LI) [Holzmann et al.], 215
- pancreatitis-associated protein protects the lung from leukocyte-induced injury (LI) [Heller et al.], 1408
- pulmonary aspiration of a milk/cream mixture (CR) [Brodsky et al.], 1533
- the role of tumor necrosis factor- $\alpha$  in the pathogenesis of aspiration pneumonitis in rats (LI) [Davidson et al.], 486
- sildenafil ameliorates effects of inhaled nitric oxide withdrawal (CR) [Atz and Wessel], 307
- transfusion-related lung injury with leukopenic reaction caused by fresh frozen plasma containing anti-NB1 (CR) [Leger et al.], 1529
- unintended inhalation of nitric oxide by contamination of compressed air: physiologic effects and interference with intended nitric oxide inhalation in acute lung injury (CI) [Benzing et al.], 945
- vaporized perfluorocarbon improves oxygenation and pulmonary function in an ovine model of acute respiratory distress syndrome (LI) [Bleil et al.], 461
- ventilatory management of severe acute respiratory failure for the Year 2000 (EV) [Bigatello et al.], 1567
- Lung, smooth muscle**
- do pipecuronium and rocuronium affect human bronchial smooth muscle? (CI) [Zappi et al.], 1616
- Lung, surfactant**
- different ventilation strategies affect lung function but do not increase tumor necrosis factor- $\alpha$  and prostacyclin production in lavaged rat lungs in vivo (LI) [Verbrugge et al.], 1834
- effects of exogenous surfactant on acute lung injury induced by intratracheal instillation of infant formula or human breast milk in rabbits (LI) [Nishina et al.], 240
- vaporized perfluorocarbon: taking the "liquid" out of liquid ventilation (EV) [Warner], 340
- Lung function and disease**
- circulatory failure after anesthesia induction in a patient with severe primary pulmonary hypertension (CR) [Höhn et al.], 1943
- combining partial liquid ventilation and prone position in experimental acute lung injury (LI) [Max et al.], 796
- comparable postoperative pulmonary atelectasis in patients given 30% or 80% oxygen during and 2 hours after colon resection (CI) [Akca et al.], 991
- congenital NOS2 deficiency protects mice from LPS-induced hyporesponsiveness to inhaled nitric oxide (LI) [Weimann et al.], 1744
- controlled airway pressure therapy, nitric oxide inhalation, prone position, and extracorporeal membrane oxygenation (ECMO) as components of an integrated approach to ARDS (CI) [Ullrich et al.], 1577
- delayed-onset epinephrine-induced pulmonary edema (CR) [Liu et al.], 1169
- diaphragmatic activity after laparoscopic cholecystectomy (CI) [Sharma et al.], 406
- different ventilation strategies affect lung function but do not increase tumor necrosis factor- $\alpha$  and prostacyclin production in lavaged rat lungs in vivo (LI) [Verbrugge et al.], 1834
- effects of exogenous surfactant on acute lung injury induced by intratracheal instillation of infant formula or human breast milk in rabbits (LI) [Nishina et al.], 240
- effects of halothane on synaptic neurotransmission to medullary expiratory neurons in the ventral respiratory group of dogs (LI) [Stuth et al.], 804
- effects of propofol and remifentanyl on phrenic nerve activity and nociceptive cardiovascular responses in rabbits (LI) [Ma et al.], 1470
- exposure to cigarette smoke impairs alveolar macrophage functions during halothane and isoflurane anesthesia in rats (LI) [Kotani et al.], 1823
- first-pass lung uptake and pulmonary clearance of propofol: assessment with a recirculatory indocyanine green pharmacokinetic model (LI) [Kuipers et al.], 1780
- hemodilution during venous gas embolization improves gas exchange, without altering  $\dot{V}_A/\dot{Q}$  or pulmonary blood flow distributions (LI) [Deem et al.], 1861
- high-dose nitric oxide inhalation increases lung injury after gastric aspiration (LI) [Nader et al.], 741
- inhaled nitric oxide: basic biology and clinical applications (MI) [Steudel et al.], 1090
- inhibition of nitric oxide synthase prevents hyporesponsiveness to inhaled nitric oxide in lungs from endotoxin-challenged rats (LI) [Holzmann et al.], 215
- ketamine preserves and propofol potentiates hypoxic pulmonary vasoconstriction compared with the conscious state in chronically instrumented dogs (LI) [Nakayama and Murray], 760
- liquid ventilation: a theoretically beneficial approach in treating systemic air embolism in lung trauma (CO) [Schulz-Stübner], 1963
- mechanisms underlying the inhibitory effect of propofol on the contraction of canine airway smooth muscle (LI) [Lin et al.], 750
- pancreatitis-associated protein protects the lung from leukocyte-induced injury (LI) [Heller et al.], 1408
- pharmacokinetic-pharmacodynamic modeling of the respiratory depressant effect of alfentanil (CI) [Bouillon et al.], 144
- positive end-expiratory pressure improves respiratory function in obese but not in normal subjects during anesthesia and paralysis (CI) [Pelosi et al.], 1221
- pulmonary aspiration of a milk/cream mixture (CR) [Brodsky et al.], 1533
- respiratory mechanics during xenon anesthesia in pigs: comparison with nitrous oxide (LI) [Calzia et al.], 1378
- the role of tumor necrosis factor- $\alpha$  in the pathogenesis of aspiration pneumonitis in rats (LI) [Davidson et al.], 486
- selective iNOS inhibition attenuates acetylcholine- and bradykinin-induced vasoconstriction in lipopolysaccharide-exposed rat lungs (LI) [Fischer et al.], 1724
- sildenafil ameliorates effects of inhaled nitric oxide withdrawal (CR) [Atz and Wessel], 307
- tension pneumothorax and apnea tests (CO) [Zisfein and Marks], 326
- tension pneumothorax complicating jet ventilation via a Cook airway exchange catheter (CR) [Baraka], 557
- transfusion-related lung injury with leukopenic reaction caused by fresh frozen plasma containing anti-NB1 (CR) [Leger et al.], 1529
- unintended inhalation of nitric oxide by contamination of compressed air: physiologic effects and interference with intended nitric oxide inhalation in acute lung injury (CI) [Benzing et al.], 945
- the use of side-stream spirometry to assess air leak during and after lung volume reduction surgery (CR) [Robinson], 571
- vaporized perfluorocarbon: taking the "liquid" out of liquid ventilation (EV) [Warner], 340

- vaporized perfluorocarbon improves oxygenation and pulmonary function in an ovine model of acute respiratory distress syndrome (LI) [Bleyl et al.], 461
- ventilatory management of severe acute respiratory failure for the Year 2000 (EV) [Bigatello et al.], 1567
- volatile anesthetics augment expression of proinflammatory cytokines in rat alveolar macrophages during mechanical ventilation (LI) [Kotani et al.], 187
- Warren Zapol: true-life adventures in science, medicine, and innovation: recipient of the 1999 Excellence in Research Award [Lowenstein], 917

 **$\beta$ -Lyase**

- compound A uptake and metabolism to mercapturic acids and 3,3,3-trifluoro-2-fluoromethoxypropanoic acid during low-flow sevoflurane anesthesia: biomarkers for exposure, risk assessment, and interspecies comparison (CI) [Kharasch and Jübert], 1267

**M****MAC. See Minimum alveolar concentration****MAC-BAR**

- anesthetic doses of sevoflurane to block cardiovascular responses to incision when administered with xenon or nitrous oxide (CI) [Nakata et al.], 369

**Magnetic resonance imaging**

- postpartum subdural hygroma after epidural analgesia (CR) [Verdú et al.], 867

**Malignant hyperthermia**

- differential effects of sevoflurane, isoflurane, and halothane on  $Ca^{2+}$  release from the sarcoplasmic reticulum of skeletal muscle (LI) [Kunst et al.], 179
- hemodynamic and metabolic manifestations of acute endotoxin infusion in pigs with and without the malignant hyperthermia mutation (LI) [Musley et al.], 833
- xenon does not trigger malignant hyperthermia in susceptible swine (LI) [Froeba et al.], 1047

**Managed care**

- at-home recovery after an anesthetic (CO), [Blatt], 887, [Ebert], 887

**Management and manpower. See Economics, management, and manpower****McArdle's disease**

- noncardiogenic pulmonary edema and rhabdomyolysis after protamine administration in a patient with unrecognized McArdle's disease (CR) [Lobato et al.], 303

**Mechanical ventilation**

- different ventilation strategies affect lung function but do not increase tumor necrosis factor- $\alpha$  and prostacyclin production in lavaged rat lungs in vivo (LI) [Verbruggen et al.], 1834
- exposure to cigarette smoke impairs alveolar macrophage functions during halothane and isoflurane anesthesia in rats (LI) [Kotani et al.], 1823
- positive end-expiratory pressure improves respiratory function in obese but not in normal subjects during anesthesia and paralysis (CI) [Pelosi et al.], 1221
- temporary malfunction of the Ohmeda Modulus CD series volume monitor caused by the overhead surgical lighting (CO), [Sattari and Reichard], 894
- unintended inhalation of nitric oxide by contamination of compressed air: physiologic effects and interference with intended nitric oxide inhalation in acute lung injury (CI) [Benzing et al.], 945
- vaporized perfluorocarbon: taking the "liquid" out of liquid ventilation (EV) [Warner], 340
- volatile anesthetics augment expression of proinflammatory cyto-

- kines in rat alveolar macrophages during mechanical ventilation (LI) [Kotani et al.], 187

**Mechanisms of anesthesia**

- the alkyl chain dependence of the effect of normal alcohols on agonist-induced nicotinic acetylcholine receptor desensitization kinetics (LI) [Raines and Zachariah], 222
- auditory evoked potentials and 40-Hz oscillations: an opportunity to study mechanisms of action of general anesthetics? (EV) [Plourde], 1187
- blockade of glutamate receptors and barbiturate anesthesia: increased sensitivity to pentobarbital-induced anesthesia despite reduced inhibition of AMPA receptors in GluR2 null mutant mice (LI) [Joo et al.], 1329
- comparative pharmacodynamic modeling of the electroencephalography-slowing effect of isoflurane, sevoflurane, and desflurane (CI) [Rehberg et al.], 397
- different actions of general anesthetics on the firing patterns of neocortical neurons mediated by the GABA $_A$  receptor (LI) [Antkowiak], 500
- direct inhibition of the N-methyl-D-aspartate receptor channel by high concentrations of opioids (LI) [Yamakura et al.], 1053
- does epidural anesthesia have general anesthetic effects? a prospective, randomized, double-blind, placebo-controlled trial (CI) [Hodgson et al.], 1687
- halothane and isoflurane increase spontaneous but reduce the N-methyl-D-aspartate-evoked dopamine release in rat striatal slices: evidence for direct presynaptic effects (LI) [Keita et al.], 1788
- human neuronal nicotinic acetylcholine receptors expressed in *Xenopus* oocytes predict efficacy of halogenated compounds that disobey the Meyer-Overton rule (LI) [Cardoso et al.], 1370
- interaction of intravenous anesthetics with human neuronal potassium currents in relation to clinical concentrations (LI) [Friederich and Urban], 1853
- isoflurane blunts electroencephalographic and thalamic-reticular formation responses to noxious stimulation in goats (LI) [Antognini and Carstens], 1770
- the mechanism of inhibitory actions of propofol on rat supraoptic neurons (LI) [Inoue et al.], 167
- quantitative and qualitative effects of isoflurane on movement occurring after noxious stimulation (LI) [Antognini et al.], 1064
- on the relevance of "clinically relevant concentrations" of inhaled anesthetics in vitro experiments (SA) [Eckenhoff and Johansson], 856
- specific actions of halothane, isoflurane, and desflurane on sympathetic activity and A $\delta$  and C somatosympathetic reflexes recorded in renal nerves in dogs (LI) [Pac-Soo et al.], 470
- stereoselectivity of bupivacaine in local anesthetic-sensitive ion channels of peripheral nerve (LI) [Nau et al.], 786
- suppression of central nervous system sodium channels by propofol (LI) [Rehberg and Duch], 512

**Medical malpractice**

- the legal system and patient safety: charting a divergent course: the relationship between malpractice litigation and human errors (EV) [Liang and Cullen], 609
- relationship between malpractice litigation and human errors (SA) [Edbril and Lagasse], 848
- ulnar nerve pressure: influence of arm position and relationship to somatosensory evoked potentials (CI) [Prielipp et al.], 345
- will we ever understand perioperative neuropathy? a fresh approach offers hope and insight (EV) [Caplan], 335

**Medicolegal issues**

- the American Society of Anesthesiologists Closed Claims Project: what have we learned, how has it affected practice, and how will it affect practice in the future? (CCC) [Cheney], 552

- the legal system and patient safety: charting a divergent course: the relationship between malpractice litigation and human errors (EV) [Liang and Cullen], 609
- a matter of life and death: what every anesthesiologist should know about the medical, legal, and ethical aspects of declaring brain death (RA) [Van Norman], 275
- relationship between malpractice litigation and human errors (SA) [Edbril and Lagasse], 848
- trademark? (CO), [Baum], 582
- Meetings.** See **Reports of scientific meetings**
- Memory.** See **Behavior, memory, and awareness**
- Meperidine**
- meperidine and lidocaine block of recombinant voltage-dependent  $\text{Na}^+$  channels: evidence that meperidine is a local anesthetic (LI) [Wagner et al.], 1481
- Mepivacaine**
- a new anterior approach to the sciatic nerve block (CI) [Chelly and Delaunay], 1655
- no enhancement of sensory and motor blockade by neostigmine added to mepivacaine axillary plexus block (CI) [Bouaziz et al.], 78
- Metabolism, drug.** See **Drug metabolism**
- N-Methyl-D-aspartate.** See **NMDA and NMDA receptors**
- Meyer-Overton rule**
- human neuronal nicotinic acetylcholine receptors expressed in *Xenopus* oocytes predict efficacy of halogenated compounds that disobey the Meyer-Overton rule (LI) [Cardoso et al.], 1370
- Microcirculation**
- direct effects of  $\alpha_1$ - and  $\alpha_2$ -adrenergic agonists on spinal and cerebral pial vessels in dogs (LI) [Iida et al.], 479
- effects of hypoxia-reoxygenation on microvascular endothelial function in the rat hippocampal slice (LI) [Staunton et al.], 1462
- microcirculatory basis for nonuniform flow delivery with intravenous nitroprusside (LI) [Mustafa et al.], 723
- Microdialysis**
- acetaminophen inhibits spinal prostaglandin  $\text{E}_2$  release after peripheral noxious stimulation (LI) [Muth-Selbach et al.], 231
- the analgesic action of nitrous oxide is dependent on the release of norepinephrine in the dorsal horn of the spinal cord (LI) [Zhang et al.], 1401
- halothane and isoflurane increase spontaneous but reduce the N-methyl-D-aspartate-evoked dopamine release in rat striatal slices: evidence for direct presynaptic effects (LI) [Keita et al.], 1788
- intestinal luminal microdialysis: a new approach to assess gut mucosal ischemia (LI) [Tenhunen et al.], 1807
- Midazolam**
- analgesic interaction between intrathecal midazolam and glutamate receptor antagonists on thermal-induced pain in rats (LI) [Nishiyama et al.], 531
- Minimum alveolar concentration**
- additive contribution of nitrous oxide to sevoflurane minimum alveolar concentration for tracheal intubation in children (CI) [Swan et al.], 667
- does epidural anesthesia have general anesthetic effects? a prospective, randomized, double-blind, placebo-controlled trial (CI) [Hodgson et al.], 1687
- isoflurane blunts electroencephalographic and thalamic-reticular formation responses to noxious stimulation in goats (LI) [Antognini and Carstens], 1770
- quantitative and qualitative effects of isoflurane on movement occurring after noxious stimulation (LI) [Antognini et al.], 1064
- on the relevance of "clinically relevant concentrations" of inhaled anesthetics in *in vitro* experiments (SA) [Eckenhoff and Johansson], 856
- Mitochondria**
- anesthetic preconditioning: not just for the heart? (EV) [Lynch], 606
- Mitral valve**
- the case of the missing fragment: detection and retrieval of a portion of broken valve as it was ejected from the heart (CR) [Michelsen and Shanewise], 560
- Mivacurium**
- evaluation of neuromuscular and cardiovascular effects of two doses of rapacurium (ORG 9487) versus mivacurium and succinylcholine (CI) [Miguel et al.], 1648
- pharmacodynamics and the plasma concentration of mivacurium during spontaneous recovery and neostigmine-facilitated recovery (CI) [Lien et al.], 119
- Mivazerol**
- effect of mivazerol on perioperative cardiac complications during non-cardiac surgery in patients with coronary heart disease: the European mivazerol trial (EMIT) (CI) [Oliver et al.], 951
- Models and modeling**
- can postoperative nausea and vomiting be predicted? (CI) [Sinclair et al.], 109
- comparative pharmacodynamic modeling of the electroencephalography-slowing effect of isoflurane, sevoflurane, and desflurane (CI) [Rehberg et al.], 397
- Cruickshank, Mathematics and Statistics in Anaesthesia (EM) [Shaffer], 1181
- effect of epinephrine on lidocaine clearance *in vivo*: a microdialysis study in humans (CI) [Bernards and Kopacz], 962
- pharmacokinetic-pharmacodynamic modeling of the respiratory depressant effect of alfentanil (CI) [Bouillon et al.], 144
- on the relevance of "clinically relevant concentrations" of inhaled anesthetics in *in vitro* experiments (SA) [Eckenhoff and Johansson], 856
- sex differences in cholinergic analgesia I: a supplemental nicotinic mechanism in normal females (LI) [Chiari et al.], 1447
- sex differences in cholinergic analgesia II: differing mechanisms in two models of allodynia (LI) [Lavand'homme and Eisenach], 1455
- amplified risk score for predicting postoperative nausea and vomiting: conclusions from cross-validations between two centers (CI) [Apfel et al.], 693
- statistical method to evaluate management strategies to decrease variability in operating room utilization (EC) [Dexter et al.], 262
- which algorithm for scheduling add-on elective cases maximizes operating room utilization? use of bin packing algorithms and fuzzy constraints in operating room management (EC) [Dexter et al.], 1491
- Molecular biology**
- tissue factor expression in vital organs during murine traumatic shock: role of transcription factors AP-1 and NF- $\kappa\text{B}$  (LI) [Armstrong et al.], 1844
- Monitoring**
- the American Society of Anesthesiologists Closed Claims Project: what have we learned, how has it affected practice, and how will it affect practice in the future? (CCC) [Cheney], 552
- anticoagulation monitoring during cardiac surgery: a review of current and emerging techniques (RA) [Despotis et al.], 1122
- auditory evoked potentials and 40-Hz oscillations: an opportunity to study mechanisms of action of general anesthetics? (EV) [Plourde], 1187
- carbon dioxide monitoring during deep conscious sedation using nasopharyngeal airways (CO) [Dominguez], 1177
- correlation between cerebral oxygen saturation measured by near-infrared spectroscopy and jugular oxygen saturation in patients with severe closed head injury (CI) [Ter Minassian et al.], 985

- cost-efficient end-tidal carbon dioxide monitoring via Hudson-style mask (CO) [Kempen], 1176
- digital display of endotracheal tube cuff pressures made simple (CO) [Doyle], 329
- forty-hertz midlatency auditory evoked potential activity predicts wakeful response during desflurane and propofol anesthesia in volunteers (CI) [Dutton et al.], 1209
- a new noninvasive method to measure blood pressure: results of a multicenter trial (CI) [Belani et al.], 686
- new temperature monitoring guidelines: an observation and caveat (CO) [Ward], 325
- plethysmographic pulse oximeter waveform variation as an indicator of successful epidural blockade: a prospective study (CO) [Sinha et al.], 899
- probable carbon dioxide embolism during endoscopically assisted varicose vein stripping (CR) [Vidovich and Lojeski], 1527
- questions use of nasal cannula for oxygen supplementation during cataract surgery (CO), [Livingston], 1176
- shivering complicating the treatment of neurologically impaired surgical and intensive care unit patients (CR) [Keegan et al.], 874
- signal-averaged P-wave duration does not predict atrial fibrillation after thoracic surgery (CI) [Amar et al.], 16
- a simple and handy way to affix a safety pin to an earpiece tubing (CO) [Yamashita and Osaka], 1561
- temporary malfunction of the Ohmeda Modulus CD series volume monitor caused by the overhead surgical lighting (CO), [Riddle], 895, [Sattari and Reichard], 894
- Tobin (ed.), *Principles and Practice of Intensive Care Monitoring* (EM) [Breslow], 903
- the use of side-stream spirometry to assess air leak during and after lung volume reduction surgery (CR) [Robinson], 571
- Morphine**
- effects of morphine and tramadol on somatic and visceral sensory function and gastrointestinal motility after abdominal surgery (CI) [Wilder-Smith et al.], 639
- effects of perioperative analgesic technique on the surgical outcome and duration of rehabilitation after major knee surgery (CI) [Capdevila et al.], 8
- morphine-sparing effect of acetaminophen in pediatric day-case surgery (CI) [Korpela et al.], 442
- regional anesthesia and postoperative pain management: long-term benefits from a short-term intervention (EV) [Todd and Brown], 1
- Movement disorders**
- shivering complicating the treatment of neurologically impaired surgical and intensive care unit patients (CR) [Keegan et al.], 874
- Myocardial ischemia. See Coronary circulation and myocardial ischemia**
- Myopathy**
- a new twist to myopathy of critical illness (EV) [Martyn and Vincent], 337
- N**
- Naltrexone**
- the analgesic action of nitrous oxide is dependent on the release of norepinephrine in the dorsal horn of the spinal cord (LI) [Zhang et al.], 1401
- Nasogastric tube**
- oro- and nasogastric tube passage in intubated patients: fiberoptic description of where they go at the laryngeal level and how to make them enter the esophagus (CI) [Ozer and Benumof], 137
- Nasotracheal intubation**
- use of the Endotrol endotracheal tube and a light wand for blind nasotracheal intubation (CO), [Asai], 1557, [Iseki and Murakawa], 1557
- Nausea, vomiting, and antiemetics**
- alfentanil causes less postoperative nausea and vomiting than equipotent doses of fentanyl or sufentanil in outpatients (CI) [Langevin et al.], 1666
- can postoperative nausea and vomiting be predicted? (CI) [Sinclair et al.], 109
- optimal propofol-alfentanil combinations for supplementing nitrous oxide for outpatient surgery (CI) [Pavlin et al.], 97
- recovery profile, costs, and patient satisfaction with propofol and sevoflurane for fast-track office-based anesthesia (EC) [Tang et al.], 253
- a simplified risk score for predicting postoperative nausea and vomiting: conclusions from cross-validations between two centers (CI) [Apfel et al.], 693
- supplemental oxygen reduces the incidence of postoperative nausea and vomiting (CI) [Greif et al.], 1246
- Neostigmine**
- early reversal of rapacuronium with neostigmine (CI) [Purdy et al.], 51
- intrathecal neostigmine and sufentanil for early labor analgesia (CI) [Nelson et al.], 1293
- no enhancement of sensory and motor blockade by neostigmine added to mepivacaine axillary plexus block (CI) [Bouaziz et al.], 78
- pharmacodynamics and the plasma concentration of mivacurium during spontaneous recovery and neostigmine-facilitated recovery (CI) [Lien et al.], 119
- sex differences in cholinergic analgesia I: a supplemental nicotinic mechanism in normal females (LI) [Chiari et al.], 1447
- sex differences in cholinergic analgesia II: differing mechanisms in two models of allodynia (LI) [Lavand'homme and Eisenach], 1455
- Nerve blocks. See also Local anesthesia and anesthetics; Regional anesthesia and analgesia**
- confirmation of caudal needle placement using nerve stimulation (CI) [Tsui et al.], 374
- intravenous regional anesthesia using lidocaine and clonidine (CI) [Reuben et al.], 654
- lumbar sympathetic blocks speed early and second stage induced labor in nulliparous women (CI) [Leighton et al.], 90:1039, [erratum] 602
- major ambulatory surgery with continuous regional anesthesia and a disposable infusion pump (CR) [Klein et al.], 563
- a new anterior approach to the sciatic nerve block (CI) [Chelly and Delaunay], 1655
- no enhancement of sensory and motor blockade by neostigmine added to mepivacaine axillary plexus block (CI) [Bouaziz et al.], 78
- pain: the past, present, and future of anesthesiology? (SA) [Cousins], 538
- reverse arterial blood flow mediated local anesthetic central nervous system toxicity during axillary brachial plexus block (CO) [Dominguez and Garbaccio], 901
- Nerve injury**
- the American Society of Anesthesiologists Closed Claims Project: what have we learned, how has it affected practice, and how will it affect practice in the future? (CCC) [Cheney], 552
- influence of preemptive treatment with MK-801, an N-methyl-D-aspartate receptor antagonist, on development of neuropathic symptoms induced by spinal nerve ligation in the rat (LR) [Wei and Pertovaara], 313

## SUBJECT INDEX TO VOLUME 91

## Nerve injury—Neurotransmitter release and uptake

- pain: the past, present, and future of anesthesiology? (SA) [Cousins], 538
- ulnar nerve pressure: influence of arm position and relationship to somatosensory evoked potentials (CI) [Prielipp et al.], 345
- will we ever understand perioperative neuropathy? a fresh approach offers hope and insight (EV) [Caplan], 335
- Nerve physiology and function**
- high thoracic epidural anesthesia does not inhibit sympathetic nerve activity in the lower extremities (CI) [Magnúsdóttir et al.], 1299
- meperidine and lidocaine block of recombinant voltage-dependent  $\text{Na}^+$  channels: evidence that meperidine is a local anesthetic (LI) [Wagner et al.], 1481
- obstetric anesthesia: what have you done for us lately? (EV) [Eisenach], 907
- specific actions of halothane, isoflurane, and desflurane on sympathetic activity and A $\delta$  and C somatosympathetic reflexes recorded in renal nerves in dogs (LI) [Pac-Soo et al.], 470
- stereoselectivity of bupivacaine in local anesthetic-sensitive ion channels of peripheral nerve (LI) [Nau et al.], 786
- Neurologic complications. See Nerve injury**
- Neurologic deficits**
- incidence of spinal epidural abscess after epidural analgesia: a national 1-year survey (SA) [Wang et al.], 1928
- Neuromuscular transmission and blockade**
- cecal ligation and puncture peritonitis model shows decreased nicotinic acetylcholine receptor numbers in rat muscle: immunopathologic mechanisms? (LI) [Tsukagoshi et al.], 448
- comparison of the intubation conditions provided by rapacurium (ORG 9487) or succinylcholine in humans during anesthesia with fentanyl and propofol (CI) [Fleming et al.], 1311
- do pipecuronium and rocuronium affect human bronchial smooth muscle? (CI) [Zappi et al.], 1616
- early reversal of rapacurium with neostigmine (CI) [Purdy et al.], 51
- evaluation of neuromuscular and cardiovascular effects of two doses of rapacurium (ORG 9487) versus mivacurium and succinylcholine (CI) [Miguel et al.], 1648
- intramuscular rapacurium in infants and children: dose-ranging and tracheal intubating conditions (CI) [Reynolds et al.], 1285
- intramuscular rocuronium in infants and children: a multicenter study to evaluate tracheal intubating conditions, onset, and duration of action (CI) [Kaplan et al.], 633
- a new twist to myopathy of critical illness (EV) [Martyn and Vincent], 337
- the onset/offset profiles of rapacurium and succinylcholine are not identical (CO) [Kopman], 1554
- pharmacodynamics and the plasma concentration of mivacurium during spontaneous recovery and neostigmine-facilitated recovery (CI) [Lien et al.], 119
- pharmacokinetics and pharmacodynamics of rapacurium in patients with cirrhosis (CI) [Duvaldestin et al.], 1505
- pharmacokinetics and pharmacodynamics of vecuronium in rats with systemic inflammatory response syndrome: treatment with  $\text{N}^G$ -monomethyl-L-arginine (LI) [Blöbner et al.], 999
- rapid onset/offset of rapacurium bromide explained? (CO), [Fisher and Wright], 1555, [Proost et al.], 1554
- rapid tracheal intubation with rocuronium: a probability approach to determining dose (CI) [Kirkegaard-Nielsen et al.], 131
- rocuronium-cisatracurium combinations (CO), [Donati and Plaud], 587, [Naguib], 588
- an unexpected hyperkalemic response to succinylcholine during electroconvulsive therapy for catatonic schizophrenia (CR) [Cooper et al.], 574
- Neuronal electrophysiology**
- the alkyl chain dependence of the effect of normal alcohols on agonist-induced nicotinic acetylcholine receptor desensitization kinetics (LI) [Raines and Zachariah], 222
- blockade of glutamate receptors and barbiturate anesthesia: increased sensitivity to pentobarbital-induced anesthesia despite reduced inhibition of AMPA receptors in GluR2 null mutant mice (LI) [Joo et al.], 1329
- dibucaine and tetracaine inhibit the activation of mitogen-activated protein kinase mediated by L-type calcium channels in PC12 cells (LI) [Kansha et al.], 1798
- different actions of general anesthetics on the firing patterns of neocortical neurons mediated by the GABA $_A$  receptor (LI) [Antkowiak], 500
- direct inhibition of the N-methyl-D-aspartate receptor channel by high concentrations of opioids (LI) [Yamakura et al.], 1053
- effects of halothane on synaptic neurotransmission to medullary expiratory neurons in the ventral respiratory group of dogs (LI) [Stuth et al.], 804
- human neuronal nicotinic acetylcholine receptors expressed in *Xenopus* oocytes predict efficacy of halogenated compounds that disobey the Meyer-Overton rule (LI) [Cardoso et al.], 1370
- incision-induced changes in receptive field properties of rat dorsal horn neurons (LI) [Zahn and Brennan], 772
- interaction of intravenous anesthetics with human neuronal potassium currents in relation to clinical concentrations (LI) [Friederich and Urban], 1853
- tooth pulp- and facial hair mechanoreceptor-evoked responses of trigeminal sensory neurons are attenuated during ketamine anesthesia (LI) [Cairns et al.], 1025
- Neuropathy**
- influence of preemptive treatment with MK-801, an N-methyl-D-aspartate receptor antagonist, on development of neuropathic symptoms induced by spinal nerve ligation in the rat (LR) [Wei and Pertovaara], 313
- intrathecal adenosine interacts with a spinal noradrenergic system to produce antinociception in nerve-injured rats (LI) [Gomes et al.], 1072
- management of post-thoracotomy pseudoangina and myofascial pain with botulinum toxin (CR) [Diaz and Gould], 877
- pain: the past, present, and future of anesthesiology? (SA) [Cousins], 538
- ulnar nerve pressure: influence of arm position and relationship to somatosensory evoked potentials (CI) [Prielipp et al.], 345
- will we ever understand perioperative neuropathy? a fresh approach offers hope and insight (EV) [Caplan], 335
- Neuroprotection**
- overexpression of bcl-x $_L$  protects astrocytes from glucose deprivation and is associated with higher glutathione, ferritin, and iron levels (LI) [Xu et al.], 1036
- Neurosurgical anesthesia**
- correlation between cerebral oxygen saturation measured by near-infrared spectroscopy and jugular oxygen saturation in patients with severe closed head injury (CI) [Ter Minassian et al.], 985
- pharmacokinetics of thiopental enantiomers during and following prolonged high-dose therapy (CI) [Cordato et al.], 1693
- sevoflurane increases lumbar cerebrospinal fluid pressure in normocapnic patients undergoing transsphenoidal hypophysectomy (CI) [Talke et al.], 127
- shivering complicating the treatment of neurologically impaired surgical and intensive care unit patients (CR) [Keegan et al.], 874
- Neurotransmitter release and uptake**
- the analgesic action of nitrous oxide is dependent on the release of norepinephrine in the dorsal horn of the spinal cord (LI) [Zhang et al.], 1401

- deep hypothermia and rewarming alters glutamate levels and glycogen content in cultured astrocytes (LI) [Bissonnette et al.], 1763
- Newborn**
- aseptic meningitis after spinal anesthesia in an infant (CR) [Easley et al.], 305
  - attempted placement of a thoracic epidural catheter via the caudal route in a newborn (CO) [Casta], 1965
  - inhaled nitric oxide: basic biology and clinical applications (MI) [Steudel et al.], 1090
- Nitecapone**
- nitecapone reduces cardiac neutrophil accumulation in clinical open heart surgery (CI) [Pesonen et al.], 355
- Nitric oxide and nitric oxide synthase**
- activation of spinal N-methyl-D-aspartate receptors stimulates a nitric oxide/cyclic guanosine 3',5'-monophosphate/glutamate release cascade in nociceptive signaling (LI) [Kawamata and Omote], 1415
  - congenital NOS2 deficiency protects mice from LPS-induced hyporesponsiveness to inhaled nitric oxide (LI) [Weimann et al.], 1744
  - controlled airway pressure therapy, nitric oxide inhalation, prone position, and extracorporeal membrane oxygenation (ECMO) as components of an integrated approach to ARDS (CI) [Ullrich et al.], 1577
  - inhaled nitric oxide: basic biology and clinical applications (MI) [Steudel et al.], 1090
  - inhibition of nitric oxide synthase prevents hyporesponsiveness to inhaled nitric oxide in lungs from endotoxin-challenged rats (LI) [Holzmann et al.], 215
  - microcirculatory basis for nonuniform flow delivery with intravenous nitroprusside (LI) [Mustafa et al.], 723
  - pharmacokinetics and pharmacodynamics of vecuronium in rats with systemic inflammatory response syndrome: treatment with N<sup>G</sup>-monomethyl-L-arginine (LI) [Blobner et al.], 999
  - propofol-induced depression of cultured rat ventricular myocytes is related to the M<sub>2</sub>-acetylcholine receptor-NO-cGMP signaling pathway (LI) [Yamamoto et al.], 1712
  - selective iNOS inhibition attenuates acetylcholine- and bradykinin-induced vasoconstriction in lipopolysaccharide-exposed rat lungs (LI) [Fischer et al.], 1724
  - sevoflurane mimics ischemic preconditioning effects on coronary flow and nitric oxide release in isolated hearts (LI) [Novaliya et al.], 701
  - spinal antinociceptive effect of epidural nonsteroidal antiinflammatory drugs on nitric oxide-induced hyperalgesia in rats (LI) [Masue et al.], 198
  - Warren Zapol: true-life adventures in science, medicine, and innovation: recipient of the 1999 Excellence in Research Award [Lowenstein], 917
- Nitric oxide inhalation**
- congenital NOS2 deficiency protects mice from LPS-induced hyporesponsiveness to inhaled nitric oxide (LI) [Weimann et al.], 1744
  - controlled airway pressure therapy, nitric oxide inhalation, prone position, and extracorporeal membrane oxygenation (ECMO) as components of an integrated approach to ARDS (CI) [Ullrich et al.], 1577
  - high-dose nitric oxide inhalation increases lung injury after gastric aspiration (LI) [Nader et al.], 741
  - inhaled nitric oxide: basic biology and clinical applications (MI) [Steudel et al.], 1090
  - inhibition of nitric oxide synthase prevents hyporesponsiveness to inhaled nitric oxide in lungs from endotoxin-challenged rats (LI) [Holzmann et al.], 215
  - sildenafil ameliorates effects of inhaled nitric oxide withdrawal (CR) [Atz and Wessel], 307
  - unintended inhalation of nitric oxide by contamination of compressed air: physiologic effects and interference with intended nitric oxide inhalation in acute lung injury (CI) [Benzing et al.], 945
- Nitroglycerin and nitroprusside**
- microcirculatory basis for nonuniform flow delivery with intravenous nitroprusside (LI) [Mustafa et al.], 723
- Nitrous oxide**
- additive contribution of nitrous oxide to sevoflurane minimum alveolar concentration for tracheal intubation in children (CI) [Swan et al.], 667
  - the analgesic action of nitrous oxide is dependent on the release of norepinephrine in the dorsal horn of the spinal cord (LI) [Zhang et al.], 1401
  - causes of nitrous oxide contamination in operating rooms (CO), [Byhahn and Westphal], 1960, [Kanmura], 1961
  - optimal propofol-alfentanil combinations for supplementing nitrous oxide for outpatient surgery (CI) [Pavlin et al.], 97
  - respiratory mechanics during xenon anesthesia in pigs: comparison with nitrous oxide (LI) [Calzia et al.], 1378
  - thermoregulatory thresholds for vasoconstriction in patients anesthetized with various 1-minimum alveolar concentration combinations of xenon, nitrous oxide, and isoflurane (CI) [Goto et al.], 626
- NMDA and NMDA receptors. See Glutamate and glutamate receptors**
- Nociception. See also Pain physiology and pharmacology**
- acetaminophen inhibits spinal prostaglandin E<sub>2</sub> release after peripheral noxious stimulation (LI) [Muth-Selbach et al.], 231
  - pain: the past, present, and future of anesthesiology? (SA) [Cousins], 538
  - specific actions of halothane, isoflurane, and desflurane on sympathetic activity and A $\delta$  and C somatosympathetic reflexes recorded in renal nerves in dogs (LI) [Pac-Soo et al.], 470
- Nonpatient care**
- the importance of professional obligations: nonpatient care obligations of anesthesiologists (EV) [Neeld], 915
  - nonpatient care obligations of anesthesiologists (SA) [Waisel], 1152
- Nonsteroidal antiinflammatory drugs**
- evaluation of interaction between gabapentin and ibuprofen on the formalin test in rats (LI) [Yoon and Yaksh], 1006
  - gastric perforation associated with the use of celecoxib (CR) [Reuben and Steinberg], 1548
  - spinal antinociceptive effect of epidural nonsteroidal antiinflammatory drugs on nitric oxide-induced hyperalgesia in rats (LI) [Masue et al.], 198
- Norepinephrine**
- the analgesic action of nitrous oxide is dependent on the release of norepinephrine in the dorsal horn of the spinal cord (LI) [Zhang et al.], 1401

O

**Obesity**

- positive end-expiratory pressure improves respiratory function in obese but not in normal subjects during anesthesia and paralysis (CI) [Pelosi et al.], 1221

**Obstetric anesthesia**

- analgesic and hemodynamic effects of intrathecal clonidine as the sole analgesic agent during first stage of labor: a dose-response study (CI) [Chiari et al.], 388
- anesthetic management of the parturient with systemic lupus erythematosus, pulmonary hypertension, and pulmonary edema (CR) [Cuenco et al.], 568

- bupivacaine augments intrathecal fentanyl for labor analgesia (CI) [Palmer et al.], 84
- combined spinal-epidural analgesia in obstetrics (CCC) [Eisenach], 299, [erratum] 906
- effect of combined spinal-epidural ambulatory labor analgesia on balance (CI) [Pickering et al.], 436
- effects of crystalloid and colloid preload on blood volume in the parturient undergoing spinal anesthesia for elective cesarean section (CI) [Ueyama et al.], 1571
- the influence of the obstetrician in the relationship between epidural analgesia and cesarean section for dystocia (CI) [Segal et al.], 90
- intraoperative and postoperative analgesic efficacy and adverse effects of intrathecal opioids in patients undergoing cesarean section with spinal anesthesia: a qualitative and quantitative systematic review of randomized controlled trials (RA) [Dahl et al.], 1919
- intrathecal neostigmine and sufentanil for early labor analgesia (CI) [Nelson et al.], 1293
- is combined spinal-epidural analgesia associated with more rapid cervical dilation in nulliparous patients when compared with conventional epidural analgesia? (CI) [Tsen et al.], 920
- lumbar sympathetic blocks speed early and second stage induced labor in nulliparous women (CI) [Leighton et al.], 90:1039, [erratum] 602
- management of anesthesia for the pregnant surgical patient (CCC) [Rosen], 1159
- obstetric anesthesia: what have you done for us lately? (EV) [Eisenach], 907
- postpartum subdural hygroma after epidural analgesia (CR) [Verdú et al.], 867
- spinal hypotension associated with cesarean section: will preload ever work? (EV) [Rout and Rocke], 1565
- Obstruction, airway. See Airway management**
- Operating room**
- forecasting surgical groups' total hours of elective cases for allocation of block time: application of time series analysis to operating room management (EC) [Dexter et al.], 1501
- prediction bounds for case scheduling: interpret with caution (CO), [Dexter], 590, [Overdyk and Rust], 589
- statistical method to evaluate management strategies to decrease variability in operating room utilization (EC) [Dexter et al.], 262
- which algorithm for scheduling add-on elective cases maximizes operating room utilization? use of bin packing algorithms and fuzzy constraints in operating room management (EC) [Dexter et al.], 1491
- Opioids**
- alfentanil causes less postoperative nausea and vomiting than equipotent doses of fentanyl or sufentanil in outpatients (CI) [Langevin et al.], 1666
- bupivacaine augments intrathecal fentanyl for labor analgesia (CI) [Palmer et al.], 84
- combined spinal-epidural analgesia in obstetrics (CCC) [Eisenach], 299, [erratum] 906
- direct inhibition of the N-methyl-D-aspartate receptor channel by high concentrations of opioids (LI) [Yamakura et al.], 1053
- effect of the frequency of transcutaneous electrical nerve stimulation on the postoperative opioid analgesic requirement and recovery profile (CI) [Hamza et al.], 1232
- effects of morphine and tramadol on somatic and visceral sensory function and gastrointestinal motility after abdominal surgery (CI) [Wilder-Smith et al.], 639
- fentanyl pharmacokinetics in hemorrhagic shock: a porcine model (LI) [Egan et al.], 156
- interaction of intravenous anesthetics with human neuronal potassium currents in relation to clinical concentrations (LI) [Friedrich and Urban], 1853
- intramuscular opioid injections: a step in the wrong direction (CO), [Choinière et al.], 892, [Fitzgibbon et al.], 891
- intraoperative and postoperative analgesic efficacy and adverse effects of intrathecal opioids in patients undergoing cesarean section with spinal anesthesia: a qualitative and quantitative systematic review of randomized controlled trials (RA) [Dahl et al.], 1919
- intrathecal neostigmine and sufentanil for early labor analgesia (CI) [Nelson et al.], 1293
- meperidine and lidocaine block of recombinant voltage-dependent Na<sup>+</sup> channels: evidence that meperidine is a local anesthetic (LI) [Wagner et al.], 1481
- optimal propofol-alfentanil combinations for supplementing nitrous oxide for outpatient surgery (CI) [Pavlin et al.], 97
- pharmacokinetic-pharmacodynamic modeling of the respiratory depressant effect of alfentanil (CI) [Bouillon et al.], 144
- rapid opioid detoxification during general anesthesia: a review of 20 patients (CI) [Gold et al.], 1639
- ritonavir's role in reducing fentanyl clearance and prolonging its half-life (CI) [Olkola et al.], 681
- ORG 9487. See Rapacuronium**
- Organ donation. See also Brain death**
- a matter of life and death: what every anesthesiologist should know about the medical, legal, and ethical aspects of declaring brain death (RA) [Van Norman], 275
- Orogastric tube**
- oro- and nasogastric tube passage in intubated patients: fiberoptic description of where they go at the laryngeal level and how to make them enter the esophagus (CI) [Ozer and Benumof], 137
- Oropharyngeal airway, cuffed. See Laryngeal mask airway and COPA**
- Orthopedic surgery**
- anesthetic management of the elderly: measuring function beyond the immediate perioperative horizon (EV) [Raja and Haythornthwaite], 909
- effects of perioperative analgesic technique on the surgical outcome and duration of rehabilitation after major knee surgery (CI) [Capdevila et al.], 8
- major ambulatory surgery with continuous regional anesthesia and a disposable infusion pump (CR) [Klein et al.], 563
- perflubron emulsion delays blood transfusions in orthopedic surgery (CI) [Spahn et al.], 1195
- Otolaryngology**
- intraoperative anaphylactic shock from bacitracin nasal packing after septorhinoplasty (CR) [Gall et al.], 1545
- Outcomes. See Risk and outcomes**
- Outcomes Research™ Group**
- trademark? (CO), [Baum], 582, [Sessler], 583
- Oximetry, pulse**
- plethysmographic pulse oximeter waveform variation as an indicator of successful epidural blockade: a prospective study (CO) [Sinha et al.], 899
- Oxygen and oxygen transport**
- comparable postoperative pulmonary atelectasis in patients given 30% or 80% oxygen during and 2 hours after colon resection (CI) [Akca et al.], 991
- correlation between cerebral oxygen saturation measured by near-infrared spectroscopy and jugular oxygen saturation in patients with severe closed head injury (CI) [Ter Minassian et al.], 985
- crimping of a laser tube resulting in hypoxemia (CO) [Jacobs et al.], 898
- diaspirin cross-linked hemoglobin effectively restores pancreatic mi-

- circulatory failure in hemorrhagic shock (LI) [von Dobschuetz et al.], 1754
- effects of hypoxia-reoxygenation on microvascular endothelial function in the rat hippocampal slice (LI) [Staunton et al.], 1462
- extreme intraoperative blood loss and hemodilution in a Jehovah's Witness: new aspects in postoperative management (CR) [Neff et al.], 1949
- hemodilution during venous gas embolization improves gas exchange, without altering  $\dot{V}_{A-Q}$  or pulmonary blood flow distributions (LI) [Deem et al.], 1861
- perflubron emulsion delays blood transfusions in orthopedic surgery (CI) [Spahn et al.], 1195
- perfluorochemical "blood substitutes": indications for an oxygen-carrying colloid (EV) [Trempel], 1185
- potential errors in the measurement of anesthetic partial pressure in blood (CR) [Lockwood et al.], 1550
- preoxygenation: best method for both efficacy and efficiency? (EV) [Benumof], 603
- questions use of nasal cannula for oxygen supplementation during cataract surgery (CO), [Livingston], 1176. [Williams and Tomlin], 1176
- supplemental oxygen reduces the incidence of postoperative nausea and vomiting (CI) [Greif et al.], 1246
- tension pneumothorax complicating jet ventilation via a Cook airway exchange catheter (CR) [Baraka], 557
- Warren Zapol: true-life adventures in science, medicine, and innovation: recipient of the 1999 Excellence in Research Award [Lowenstein], 917

## P

**Pacing and pacemakers**

- life-threatening ventricular dysrhythmias with inadvertent asynchronous temporary pacing after cardiac surgery (CR) [Preisman and Cheng], 880

**Pain (acute/incisional). See also Pain mechanisms; Pain physiology and pharmacology**

- anesthetic doses of sevoflurane to block cardiovascular responses to incision when administered with xenon or nitrous oxide (CI) [Nakata et al.], 369
- effect of the frequency of transcutaneous electrical nerve stimulation on the postoperative opioid analgesic requirement and recovery profile (CI) [Hamza et al.], 1232
- incision-induced changes in receptive field properties of rat dorsal horn neurons (LI) [Zahn and Brennan], 772
- intrathecal neostigmine and sufentanil for early labor analgesia (CI) [Nelson et al.], 1293
- strict temperature control has no effect on injection pain with propofol (CO), [Ozturk et al.], 592. [Uda et al.], 591

**Pain assessment and measurement**

- experimental pain augments experimental dyspnea, but not vice versa in human volunteers (CI) [Nishino et al.], 1633
- the relationship between the visual analog pain intensity and pain relief scale changes during analgesic drug studies in chronic pain patients (CI) [Angst et al.], 34

**Pain management**

- effect of the duration of electrical stimulation on the analgesic response in patients with low back pain (CI) [Hamza et al.], 1622
- effect of the frequency of transcutaneous electrical nerve stimulation on the postoperative opioid analgesic requirement and recovery profile (CI) [Hamza et al.], 1232
- effects of morphine and tramadol on somatic and visceral sensory function and gastrointestinal motility after abdominal surgery (CI) [Wilder-Smith et al.], 639

- effects of perioperative analgesic technique on the surgical outcome and duration of rehabilitation after major knee surgery (CI) [Capdevila et al.], 8
- failure of a patient-controlled analgesia pump in a hyperbaric environment (CR) [Sánchez-Guijo et al.], 1540
- gastric perforation associated with the use of celecoxib (CR) [Ruben and Steinberg], 1548
- idiopathic trigeminal neuralgia associated with a severe atypical facial pain exacerbated by hydrocephalus (CO) [Iseki et al.], 1968
- intramuscular opioid injections: a step in the wrong direction (CO), [Choinière et al.], 892. [Fitzgibbon et al.], 891
- intrathecal drug therapy for chronic pain: from basic science to clinical practice (MI) [Dougherty and Staats], 1891
- intrathecal neostigmine and sufentanil for early labor analgesia (CI) [Nelson et al.], 1293
- Livingston, Pain and Suffering (EM) [Spillane], 1971
- major ambulatory surgery with continuous regional anesthesia and a disposable infusion pump (CR) [Klein et al.], 563
- management of post-thoracotomy pseudoangina and myofascial pain with botulinum toxin (CR) [Diaz and Gould], 877
- morphine-sparing effect of acetaminophen in pediatric day-case surgery (CI) [Korpela et al.], 442
- pain: the past, present, and future of anesthesiology? (SA) [Cousins], 538
- regional anesthesia and postoperative pain management: long-term benefits from a short-term intervention (EV) [Todd and Brown], 1
- the relationship between the visual analog pain intensity and pain relief scale changes during analgesic drug studies in chronic pain patients (CI) [Angst et al.], 34
- ritonavir's role in reducing fentanyl clearance and prolonging its half-life (CI) [Olkola et al.], 681
- sex differences in cholinergic analgesia I: a supplemental nicotinic mechanism in normal females (LI) [Chiari et al.], 1447
- Waldman, Atlas of Interventional Pain Management (EM) [Staats], 597

**Pain mechanisms. See also Pain physiology and pharmacology**

- activation of spinal N-methyl-D-aspartate receptors stimulates a nitric oxide/cyclic guanosine 3',5'-monophosphate/glutamate release cascade in nociceptive signaling (LI) [Kawamata and Omote], 1415
- the analgesic action of nitrous oxide is dependent on the release of norepinephrine in the dorsal horn of the spinal cord (LI) [Zhang et al.], 1401
- isoflurane blunts electroencephalographic and thalamic-reticular formation responses to noxious stimulation in goats (LI) [Antognini and Carstens], 1770
- Livingston, Pain and Suffering (EM) [Spillane], 1971
- quantitative and qualitative effects of isoflurane on movement occurring after noxious stimulation (LI) [Antognini et al.], 1064
- strict temperature control has no effect on injection pain with propofol (CO), [Ozturk et al.], 592. [Uda et al.], 591

**Pain mechanisms (peripheral)**

- tooth pulp- and facial hair mechanoreceptor-evoked responses of trigeminal sensory neurons are attenuated during ketamine anesthesia (LI) [Cairns et al.], 1025
- tourniquet constriction exacerbates hyperalgesia-related pain induced by intradermal capsaicin injection (CI) [Byas-Smith et al.], 617

**Pain mechanisms (spinal)**

- acetaminophen inhibits spinal prostaglandin  $E_2$  release after peripheral noxious stimulation (LI) [Muth-Selbach et al.], 231
- antinociceptive and hemodynamic effects of a novel  $\alpha_2$ -adrenergic agonist, MPV-2426, in sheep (LI) [Eisenach et al.], 1425
- intrathecal adenosine interacts with a spinal noradrenergic system to

- produce antinociception in nerve-injured rats (LI) [Gomes et al.], 1072
- sex differences in cholinergic analgesia II: differing mechanisms in two models of allodynia (LI) [Lavand'homme and Eisenach], 1455
- spinal antinociceptive effect of epidural nonsteroidal antiinflammatory drugs on nitric oxide-induced hyperalgesia in rats (LI) [Masue et al.], 198
- Pain physiology and pharmacology**
- acetaminophen inhibits spinal prostaglandin  $E_2$  release after peripheral noxious stimulation (LI) [Muth-Selbach et al.], 231
- activation of spinal N-methyl-D-aspartate receptors stimulates a nitric oxide/cyclic guanosine 3',5'-monophosphate/glutamate release cascade in nociceptive signaling (LI) [Kawamata and Omote], 1415
- the analgesic action of nitrous oxide is dependent on the release of norepinephrine in the dorsal horn of the spinal cord (LI) [Zhang et al.], 1401
- analgesic interaction between intrathecal midazolam and glutamate receptor antagonists on thermal-induced pain in rats (LI) [Nishiyama et al.], 531
- antinociceptive and hemodynamic effects of a novel  $\alpha_2$ -adrenergic agonist, MPV-2426, in sheep (LI) [Eisenach et al.], 1425
- effects of morphine and tramadol on somatic and visceral sensory function and gastrointestinal motility after abdominal surgery (CI) [Wilder-Smith et al.], 639
- evaluation of interaction between gabapentin and ibuprofen on the formalin test in rats (LI) [Yoon and Yaksh], 1006
- experimental pain augments experimental dyspnea, but not vice versa in human volunteers (CI) [Nishino et al.], 1633
- incision-induced changes in receptive field properties of rat dorsal horn neurons (LI) [Zahn and Brennan], 772
- influence of preemptive treatment with MK-801, an N-methyl-D-aspartate receptor antagonist, on development of neuropathic symptoms induced by spinal nerve ligation in the rat (LR) [Wei and Pertovaara], 313
- intrathecal adenosine interacts with a spinal noradrenergic system to produce antinociception in nerve-injured rats (LI) [Gomes et al.], 1072
- postoperative pain facilitates nonthermoregulatory tremor (CI) [Horn et al.], 979
- preclinical toxicity screening of intrathecal adenosine in rats and dogs (LI) [Chiari et al.], 824
- sex differences in cholinergic analgesia II: differing mechanisms in two models of allodynia (LI) [Lavand'homme and Eisenach], 1455
- spinal antinociceptive effect of epidural nonsteroidal antiinflammatory drugs on nitric oxide-induced hyperalgesia in rats (LI) [Masue et al.], 198
- Stoelting, Pharmacology and Physiology in Anesthesia Practice, 3rd Edition (EM) [Thomas], 597
- tooth pulp- and facial hair mechanoreceptor-evoked responses of trigeminal sensory neurons are attenuated during ketamine anesthesia (LI) [Cairns et al.], 1025
- tourniquet constriction exacerbates hyperalgesia-related pain induced by intradermal capsaicin injection (CI) [Byas-Smith et al.], 617
- Pain (sympathetic or causalgic). See also Pain mechanisms; Pain physiology and pharmacology; Sympathetic nervous system**
- influence of preemptive treatment with MK-801, an N-methyl-D-aspartate receptor antagonist, on development of neuropathic symptoms induced by spinal nerve ligation in the rat (LR) [Wei and Pertovaara], 313
- intrathecal adenosine interacts with a spinal noradrenergic system to produce antinociception in nerve-injured rats (LI) [Gomes et al.], 1072
- spinal antinociceptive effect of epidural nonsteroidal antiinflammatory drugs on nitric oxide-induced hyperalgesia in rats (LI) [Masue et al.], 198
- Pain treatment (postoperative)**
- effect of the frequency of transcutaneous electrical nerve stimulation on the postoperative opioid analgesic requirement and recovery profile (CI) [Hamza et al.], 1232
- effects of morphine and tramadol on somatic and visceral sensory function and gastrointestinal motility after abdominal surgery (CI) [Wilder-Smith et al.], 639
- effects of perioperative analgesic technique on the surgical outcome and duration of rehabilitation after major knee surgery (CI) [Capdevila et al.], 8
- intramuscular opioid injections: a step in the wrong direction (CO), [Fitzgibbon et al.], 891
- intrathecal ropivacaine for ambulatory surgery: a comparison between intrathecal bupivacaine and intrathecal ropivacaine for knee arthroscopy (CI) [Gautier et al.], 1239
- management of post-thoracotomy pseudoangina and myofascial pain with botulinum toxin (CR) [Diaz and Gould], 877
- morphine-sparing effect of acetaminophen in pediatric day-case surgery (CI) [Korpela et al.], 442
- postoperative pain facilitates nonthermoregulatory tremor (CI) [Horn et al.], 979
- regional anesthesia and postoperative pain management: long-term benefits from a short-term intervention (EV) [Todd and Brown], 1
- Pain (visceral)**
- effects of morphine and tramadol on somatic and visceral sensory function and gastrointestinal motility after abdominal surgery (CI) [Wilder-Smith et al.], 639
- Papilloma**
- case of Cowden's disease that caused airway obstruction during induction of anesthesia (CR) [Omote et al.], 1537
- Paracetamol**
- acetaminophen inhibits spinal prostaglandin  $E_2$  release after peripheral noxious stimulation (LI) [Muth-Selbach et al.], 231
- Parenteral nutrition**
- growth of *Staphylococcus aureus* in Diprivan and Intralipid: implications on the pathogenesis of infections (LI) [Langevin et al.], 1394
- Parturition. See Labor and delivery; Obstetric anesthesia**
- Patch clamping**
- the alkyl chain dependence of the effect of normal alcohols on agonist-induced nicotinic acetylcholine receptor desensitization kinetics (LI) [Raines and Zachariah], 222
- blockade of glutamate receptors and barbiturate anesthesia: increased sensitivity to pentobarbital-induced anesthesia despite reduced inhibition of AMPA receptors in GluR2 null mutant mice (LI) [Joo et al.], 1329
- direct inhibition of the N-methyl-D-aspartate receptor channel by high concentrations of opioids (LI) [Yamakura et al.], 1053
- interaction of intravenous anesthetics with human neuronal potassium currents in relation to clinical concentrations (LI) [Friederich and Urban], 1853
- meperidine and lidocaine block of recombinant voltage-dependent  $Na^+$  channels: evidence that meperidine is a local anesthetic (LI) [Wagner et al.], 1481
- stereoselectivity of bupivacaine in local anesthetic-sensitive ion channels of peripheral nerve (LI) [Nau et al.], 786
- Patient and physician safety**
- the American Society of Anesthesiologists Closed Claims Project: what have we learned, how has it affected practice, and how will it affect practice in the future? (CCC) [Cheney], 552

- endotracheal tube fire: comments on the advisability of not extubating (CO), [Chce and Benumof], 889, [Wolf and Sidebotham], 888
- the legal system and patient safety: charting a divergent course: the relationship between malpractice litigation and human errors (EV) [Liang and Cullen], 609
- relationship between malpractice litigation and human errors (SA) [Edbril and Lagasse], 848
- a reliable diagnosis of porphyria should precede any conclusion concerning the safety of a drug in porphyria (CO), [Asirvatham], 584
- trends in quality of anesthesia care associated with changing staffing patterns, productivity, and concurrency of case supervision in a teaching hospital (EC) [Posner and Freund], 839
- Patient-controlled analgesia**
- effect of the frequency of transcutaneous electrical nerve stimulation on the postoperative opioid analgesic requirement and recovery profile (CI) [Hamza et al.], 1232
- failure of a patient-controlled analgesia pump in a hyperbaric environment (CR) [Sánchez-Guijo et al.], 1540
- intramuscular opioid injections: a step in the wrong direction (CO), [Choinière et al.], 892, [Fitzgibbon et al.], 891
- Patient satisfaction**
- at-home recovery after an anesthetic (CO), [Blatt], 887
- effects of perioperative analgesic technique on the surgical outcome and duration of rehabilitation after major knee surgery (CI) [Capdevila et al.], 8
- Pediatric anesthesia**
- additive contribution of nitrous oxide to sevoflurane minimum alveolar concentration for tracheal intubation in children (CI) [Swan et al.], 667
- aseptic meningitis after spinal anesthesia in an infant (CR) [Easley et al.], 305
- behavioral outcomes methodology (CO), [Buckley and Korz], 1959, [Kain et al.], 1960
- caudal block in children: ropivacaine compared with bupivacaine (CI) [Khalil et al.], 1279
- changes in electroencephalogram and autonomic cardiovascular activity during induction of anesthesia with sevoflurane compared with halothane in children (CI) [Constant et al.], 1604
- how to perform differential lung ventilation in pediatric cases? (CO) [Tsujimoto et al.], 327
- intramuscular rapacurium in infants and children: dose-ranging and tracheal intubating conditions (CI) [Reynolds et al.], 1285
- intramuscular rocuronium in infants and children: a multicenter study to evaluate tracheal intubating conditions, onset, and duration of action (CI) [Kaplan et al.], 633
- intubation of a child with a difficult airway using a laryngeal mask airway and a guidewire and jet stylet (CO) [Nitahara et al.], 330
- morphine-sparing effect of acetaminophen in pediatric day-case surgery (CI) [Korpela et al.], 442
- noncardiogenic pulmonary edema and rhabdomyolysis after protamine administration in a patient with unrecognized McArdle's disease (CR) [Lobato et al.], 303
- ultrasound-guided internal jugular venous cannulation in infants: a prospective comparison with the traditional palpation method (CI) [Verghese et al.], 71
- venous access for pediatric liver transplantation (CO), [Hammer and Krane], 322, [Henderson], 323
- Pentobarbital**
- blockade of glutamate receptors and barbiturate anesthesia: increased sensitivity to pentobarbital-induced anesthesia despite reduced inhibition of AMPA receptors in GluR2 null mutant mice (LI) [Joo et al.], 1329
- different actions of general anesthetics on the firing patterns of neocortical neurons mediated by the GABA<sub>A</sub> receptor (LI) [Antkowiak], 500
- Perfluorocarbons.** See **Fluorocarbons**
- Personnel issues.** See **Economics, management, and manpower**
- Pharmacodynamics.** See **Pharmacokinetics and pharmacodynamics**
- Pharmacoeconomics**
- recovery profile, costs, and patient satisfaction with propofol and sevoflurane for fast-track office-based anesthesia (EC) [Tang et al.], 253
- Pharmacokinetics and pharmacodynamics**
- alfentanil causes less postoperative nausea and vomiting than equipotent doses of fentanyl or sufentanil in outpatients (CI) [Langevin et al.], 1666
- antinociceptive and hemodynamic effects of a novel  $\alpha_2$ -adrenergic agonist, MPV-2426, in sheep (LI) [Eisenach et al.], 1425
- comparative pharmacodynamic modeling of the electroencephalography-slowing effect of isoflurane, sevoflurane, and desflurane (CI) [Rehberg et al.], 397
- effect of epinephrine on lidocaine clearance in vivo: a microdialysis study in humans (CI) [Bernards and Kopacz], 962
- fentanyl pharmacokinetics in hemorrhagic shock: a porcine model (LI) [Egan et al.], 156
- first-pass lung uptake and pulmonary clearance of propofol: assessment with a recirculatory indocyanine green pharmacokinetic model (LI) [Kuipers et al.], 1780
- ketamine distribution described by a recirculatory pharmacokinetic model is not stereoselective (LI) [Henthorn et al.], 1733
- the onset/offset profiles of rapacurium and succinylcholine are not identical (CO) [Kopman], 1554
- optimal propofol-alfentanil combinations for supplementing nitrous oxide for outpatient surgery (CI) [Pavlin et al.], 97
- pharmacodynamics and the plasma concentration of mivacurium during spontaneous recovery and neostigmine-facilitated recovery (CI) [Lien et al.], 119
- pharmacokinetic-pharmacodynamic modeling of the respiratory depressant effect of alfentanil (CI) [Bouillon et al.], 144
- pharmacokinetics and pharmacodynamics of rapacurium in patients with cirrhosis (CI) [Duvaldestin et al.], 1305
- pharmacokinetics and pharmacodynamics of vecuronium in rats with systemic inflammatory response syndrome: treatment with N<sup>G</sup>-monomethyl-L-arginine (LI) [Blobner et al.], 999
- pharmacokinetics of thiopental enantiomers during and following prolonged high-dose therapy (CI) [Cordato et al.], 1693
- rapid onset/offset of rapacurium bromide explained? (CO), [Fisher and Wright], 1555, [Proost et al.], 1554
- on the relevance of "clinically relevant concentrations" of inhaled anesthetics in *in vitro* experiments (SA) [Eckenhoff and Johansson], 856
- ritonavir's role in reducing fentanyl clearance and prolonging its half-life (CI) [Olkola et al.], 681
- Pharmacology.** See also **Pain physiology and pharmacology; Vascular physiology and pharmacology**
- alfentanil causes less postoperative nausea and vomiting than equipotent doses of fentanyl or sufentanil in outpatients (CI) [Langevin et al.], 1666
- "label" versus "labeling" of a drug: there is a significant difference (CO), [Landow], 1557, [Moore], 1556
- potential errors in the measurement of anesthetic partial pressure in blood (CR) [Lockwood et al.], 1550
- Stoelting, *Pharmacology and Physiology in Anesthesia Practice*, 3rd Edition (EM) [Thomas], 597
- Pheochromocytoma**
- blood pressure control with fenoldopam during excision of a pheochromocytoma (CR) [Cooper and Mihm], 558

**Phosphodiesterase inhibition**

sildenafil ameliorates effects of inhaled nitric oxide withdrawal (CR) [Atz and Wessel], 307

**Phrenic nerve, function or damage**

effects of propofol and remifentanyl on phrenic nerve activity and nociceptive cardiovascular responses in rabbits (LI) [Ma et al.], 1470

**Physical chemistry**

potential errors in the measurement of anesthetic partial pressure in blood (CR) [Lockwood et al.], 1550

**Physiology. See also Circulatory physiology and hemodynamics; Pain physiology and pharmacology; Vascular physiology and pharmacology**

Stoelting, Pharmacology and Physiology in Anesthesia Practice, 3rd Edition (EM) [Thomas], 597

**Pipecuronium**

do pipecuronium and rocuronium affect human bronchial smooth muscle? (CI) [Zappi et al.], 1616

**Pirenzapine**

local anesthetics inhibit muscarinic receptor-mediated activation of extracellular signal-regulated kinases in rat pheochromocytoma PC12 cells (LI) [Tan et al.], 1014

**Plagiarism**

plagiarism and authorship (CO), [Partridge], 324, [Todd], 325

**Platelet-activating factor**

platelet-activated clotting time does not measure platelet reactivity during cardiac surgery (CI) [Shore-Lesserson et al.], 362

**Platelets and platelet function. See also Blood coagulation**

caution in performing epidural injections in patients on several antiplatelet drugs (CO) [Benzon et al.], 1558

the effect of prophylactic  $\epsilon$ -aminocaproic acid on bleeding, transfusions, platelet function, and fibrinolysis during coronary artery bypass grafting (CI) [Troianos et al.], 430

platelet-activated clotting time does not measure platelet reactivity during cardiac surgery (CI) [Shore-Lesserson et al.], 362

preoperative use of enoxaparin and tirofiban: possible association with increased bleeding postbypass (CR) [Skubas et al.], 869

propofol has both enhancing and suppressing effects on human platelet aggregation in vitro (LI) [Hirakata et al.], 1361

**Plethysmography**

plethysmographic pulse oximeter waveform variation as an indicator of successful epidural blockade: a prospective study (CO) [Sinha et al.], 899

**Pneumothorax**

airway exchange catheters: simple concept, potentially great danger (EV) [Benumof], 342

life-threatening bilateral pneumothorax caused by misconnection of the laser lens cooling system during gynecologic laparoscopy (CO) [Gueret et al.], 1179

**Politics and publishing**

plagiarism and authorship (CO), [Partridge], 324, [Todd], 325

trademark? (CO), [Baum], 582

**Porphyria**

photosensitivity and perioperative polyneuropathy complicating orthotopic liver transplantation in a patient with erythropoietic protoporphyria (CR) [Nguyen et al.], 1173

a reliable diagnosis of porphyria should precede any conclusion concerning the safety of a drug in porphyria (CO), [Asirvatham], 584

**Positioning**

combining partial liquid ventilation and prone position in experimental acute lung injury (LI) [Max et al.], 796

controlled airway pressure therapy, nitric oxide inhalation, prone position, and extracorporeal membrane oxygenation (ECMO) as components of an integrated approach to ARDS (CI) [Ulrich et al.], 1577

rhabdomyolysis after abdominal surgery in the hyperlordotic position enforced by pneumatic support (CR) [Uratsuji et al.], 310

ulnar nerve pressure: influence of arm position and relationship to somatosensory evoked potentials (CI) [Prielipp et al.], 345

will we ever understand perioperative neuropathy? a fresh approach offers hope and insight (EV) [Caplan], 335

**Positive end-expiratory pressure**

positive end-expiratory pressure improves respiratory function in obese but not in normal subjects during anesthesia and paralysis (CI) [Pelosi et al.], 1221

**Positron emission tomography (PET)**

epileptiform discharges during 2 MAC sevoflurane anesthesia in two healthy volunteers (CR) [Kaisti et al.], 1952

**Postoperative care**

at-home recovery after an anesthetic (CO), [Blatt], 887

comparable postoperative pulmonary atelectasis in patients given 30% or 80% oxygen during and 2 hours after colon resection (CI) [Akca et al.], 991

diaphragmatic activity after laparoscopic cholecystectomy (CI) [Sharma et al.], 406

effect of mivazero on perioperative cardiac complications during non-cardiac surgery in patients with coronary heart disease: the European mivazero trial (EMIT) (CI) [Oliver et al.], 951

effects of perioperative analgesic technique on the surgical outcome and duration of rehabilitation after major knee surgery (CI) [Capdevila et al.], 8

ethics for non-emergencies (CO), [Cohen], 323

intrathecal ropivacaine for ambulatory surgery: a comparison between intrathecal bupivacaine and intrathecal ropivacaine for knee arthroscopy (CI) [Gautier et al.], 1239

nursing workload associated with adverse events in the postanesthesia care unit (EC) [Cohen et al.], 1882

photosensitivity and perioperative polyneuropathy complicating orthotopic liver transplantation in a patient with erythropoietic protoporphyria (CR) [Nguyen et al.], 1173

pulmonary aspiration of a milk/cream mixture (CR) [Brodsky et al.], 1533

regional anesthesia and postoperative pain management: long-term benefits from a short-term intervention (EV) [Todd and Brown], 1

risk factors of delayed extubation, prolonged length of stay in the intensive care unit, and mortality in patients undergoing coronary artery bypass graft with fast-track cardiac anesthesia: a new cardiac risk score (CI) [Wong et al.], 936

a simplified risk score for predicting postoperative nausea and vomiting: conclusions from cross-validations between two centers (CI) [Apfel et al.], 693

supplemental oxygen reduces the incidence of postoperative nausea and vomiting (CI) [Greif et al.], 1246

**Postoperative complications. See Complications****Potassium and potassium channels**

anesthetic preconditioning: not just for the heart? (EV) [Lynch], 606

cardioprotective effects of propofol and sevoflurane in ischemic and reperfused rat hearts: role of  $K_{ATP}$  channels and interaction with the sodium-hydrogen exchange inhibitor HOE 642 (cariporide) (LI) [Mathur et al.], 1349

delayed-onset epinephrine-induced pulmonary edema (CR) [Liu et al.], 1169

interaction of intravenous anesthetics with human neuronal potassium currents in relation to clinical concentrations (LI) [Friederich and Urban], 1853

stereoselectivity of bupivacaine in local anesthetic-sensitive ion channels of peripheral nerve (LI) [Nau et al.], 786

succinylcholine hyperkalemia after burns (CO), [Gronert], 320, [Jeevendra Martyn], 321, [MacLennan et al.], 320

an unexpected hyperkalemic response to succinylcholine during

- electroconvulsive therapy for catatonic schizophrenia (CR) [Cooper et al.], 574
- Preconditioning**
- anesthetic preconditioning: not just for the heart? (EV) [Lynch], 606
  - colchicine inhibits isoflurane-induced preconditioning (LI) [Ismail et al.], 1816
  - isoflurane-enhanced recovery of canine stunned myocardium: role for protein kinase C? (LI) [Toller et al.], 713
  - sevoflurane mimics ischemic preconditioning effects on coronary flow and nitric oxide release in isolated hearts (LI) [Novaliya et al.], 701
  - sevoflurane reduces myocardial infarct size and decreases the time threshold for ischemic preconditioning in dogs (LI) [Toller et al.], 1437
- Pregnancy**
- management of anesthesia for the pregnant surgical patient (CCC) [Rosen], 1159
  - obstetric anesthesia: what have you done for us lately? (EV) [Eisenach], 907
- Premedication and sedation**
- behavioral outcomes methodology (CO), [Buckley and Korz], 1959, [Kain et al.], 1960
  - carbon dioxide monitoring during deep conscious sedation using nasopharyngeal airways (CO) [Dominguez], 1177
  - contractility in humans after coronary artery surgery: echocardiographic assessment with preload-adjusted maximal power (CI) [Schmidt et al.], 58
  - Schwid (ed.), Sedation Simulator, CD-ROM Version 1.0 for Windows (EM) [Bailey], 904
- Preoperative assessment and care**
- assessment of the patient with cardiac disease: an anesthesiologist's paradigm (CCC) [Mangano], 1521
- Preoxygenation**
- preoxygenation: best method for both efficacy and efficiency? (EV) [Benumof], 603
- Professionalism**
- the importance of professional obligations: nonpatient care obligations of anesthesiologists (EV) [Neeld], 915
  - nonpatient care obligations of anesthesiologists (SA) [Waisel], 1152
- Propofol**
- cardioprotective effects of propofol and sevoflurane in ischemic and reperfused rat hearts: role of  $K_{ATP}$  channels and interaction with the sodium-hydrogen exchange inhibitor HOE 642 (cariporide) (LI) [Mathur et al.], 1349
  - comparison of the intubation conditions provided by rapacuronium (ORG 9487) or succinylcholine in humans during anesthesia with fentanyl and propofol (CI) [Fleming et al.], 1311
  - contractility in humans after coronary artery surgery: echocardiographic assessment with preload-adjusted maximal power (CI) [Schmidt et al.], 58
  - different actions of general anesthetics on the firing patterns of neocortical neurons mediated by the GABA<sub>A</sub> receptor (LI) [Antkowiak], 500
  - effects of propofol and remifentanyl on phrenic nerve activity and nociceptive cardiovascular responses in rabbits (LI) [Ma et al.], 1470
  - first-pass lung uptake and pulmonary clearance of propofol: assessment with a recirculatory indocyanine green pharmacokinetic model (LI) [Kuipers et al.], 1780
  - forty-hertz midlatency auditory evoked potential activity predicts wakeful response during desflurane and propofol anesthesia in volunteers (CI) [Dutton et al.], 1209
  - growth of *Staphylococcus aureus* in Diprivan and Intralipid: implications on the pathogenesis of infections (LI) [Langevin et al.], 1394
  - inhibitory effects of propofol on acetylcholine-induced endothelium-dependent relaxation and prostacyclin synthesis in rabbit mesenteric resistance arteries (LI) [Yamashita et al.], 1080
  - interaction of intravenous anesthetics with human neuronal potassium currents in relation to clinical concentrations (LI) [Friederich and Urban], 1853
  - ketamine preserves and propofol potentiates hypoxic pulmonary vasoconstriction compared with the conscious state in chronically instrumented dogs (LI) [Nakayama and Murray], 760
  - the mechanism of inhibitory actions of propofol on rat supraoptic neurons (LI) [Inoue et al.], 167
  - mechanisms underlying the inhibitory effect of propofol on the contraction of canine airway smooth muscle (LI) [Lin et al.], 750
  - optimal propofol-alfentanil combinations for supplementing nitrous oxide for outpatient surgery (CI) [Pavlin et al.], 97
  - propofol has both enhancing and suppressing effects on human platelet aggregation in vitro (LI) [Hirakata et al.], 1361
  - propofol-induced depression of cultured rat ventricular myocytes is related to the  $M_2$ -acetylcholine receptor-NO-cGMP signaling pathway (LI) [Yamamoto et al.], 1712
  - recovery profile, costs, and patient satisfaction with propofol and sevoflurane for fast-track office-based anesthesia (EC) [Tang et al.], 253
  - a reliable diagnosis of porphyria should precede any conclusion concerning the safety of a drug in porphyria (CO), [Asirvatham], 584, [Mamet and Schoenfeld], 583
  - strict temperature control has no effect on injection pain with propofol (CO), [Ozturk et al.], 592, [Uda et al.], 591
  - suppression of central nervous system sodium channels by propofol (LI) [Rehberg and Duch], 512
- Proprioception**
- effect of combined spinal-epidural ambulatory labor analgesia on balance (CI) [Pickering et al.], 436
- Prostaglandins and arachidonic acids**
- acetaminophen inhibits spinal prostaglandin  $E_2$  release after peripheral noxious stimulation (LI) [Muth-Selbach et al.], 231
  - evaluation of interaction between gabapentin and ibuprofen on the formalin test in rats (LI) [Yoon and Yaksh], 1006
  - gastric perforation associated with the use of celecoxib (CR) [Reuben and Steinberg], 1548
  - inhibitory effects of propofol on acetylcholine-induced endothelium-dependent relaxation and prostacyclin synthesis in rabbit mesenteric resistance arteries (LI) [Yamashita et al.], 1080
- Prostatectomy**
- a prospective randomized comparison of three blood conservation strategies for radical prostatectomy (CI) [Monk et al.], 24
- Prosthetic heart valve**
- the case of the missing fragment: detection and retrieval of a portion of broken valve as it was ejected from the heart (CR) [Michelsen and Shanewise], 560
- Protamine**
- anticoagulation monitoring during cardiac surgery: a review of current and emerging techniques (RA) [Despotis et al.], 1122
  - noncardiogenic pulmonary edema and rhabdomyolysis after protamine administration in a patient with unrecognized Mc Ardle's disease (CR) [Lobato et al.], 303
- Protection. See Cardioprotection; Neuroprotection**
- Protein kinases**
- dibucaine and tetracaine inhibit the activation of mitogen-activated protein kinase mediated by L-type calcium channels in PC12 cells (LI) [Kansha et al.], 1798
  - isoflurane-enhanced recovery of canine stunned myocardium: role for protein kinase C? (LI) [Toller et al.], 713
  - local anesthetics inhibit muscarinic receptor-mediated activation of extracellular signal-regulated kinases in rat pheochromocytoma PC12 cells (LI) [Tan et al.], 1014

**Psychology, memory, and awareness.** See **Behavior, memory, and awareness**

**Pulmonary blood flow.** See **Lung, blood flow**

**Pulmonary circulation.** See **Lung, blood flow**

**Pulmonary edema.** See **Lung, pulmonary edema**

**Pulmonary hypertension**

anesthetic management of the parturient with systemic lupus erythematosus, pulmonary hypertension, and pulmonary edema (CR) [Cuenca et al.], 568

inhaled nitric oxide: basic biology and clinical applications (MI) [Steudel et al.], 1090

sildenafil ameliorates effects of inhaled nitric oxide withdrawal (CR) [Atz and Wessel], 307

**Pulmonary system.** See **Lung function and disease**

**Pulmonary thromboembolism**

in situ pulmonary thrombolysis using recombinant tissue plasminogen activator after cesarean delivery (CO), [Aya et al.], 578, [Nishimura et al.], 579

## R

**Radiology.** See **Imaging and radiology**

**Rapacurium**

comparison of the intubation conditions provided by rapacurium (ORG 9487) or succinylcholine in humans during anesthesia with fentanyl and propofol (CI) [Fleming et al.], 1311

early reversal of rapacurium with neostigmine (CI) [Purdy et al.], 51

evaluation of neuromuscular and cardiovascular effects of two doses of rapacurium (ORG 9487) versus mivacurium and succinylcholine (CI) [Miguel et al.], 1648

intramuscular rapacurium in infants and children: dose-ranging and tracheal intubating conditions (CI) [Reynolds et al.], 1285

the onset/offset profiles of rapacurium and succinylcholine are not identical (CO) [Kopman], 1554

pharmacokinetics and pharmacodynamics of rapacurium in patients with cirrhosis (CI) [Duvaldestin et al.], 1305

rapid onset/offset of rapacurium bromide explained? (CO), [Fisher and Wright], 1555, [Proost et al.], 1554

**Reactive oxygen species.** See **Free radicals and superoxide**

**Recall.** See **Behavior, memory, and awareness**

**Receptors and signal transduction**

activation of spinal N-methyl-D-aspartate receptors stimulates a nitric oxide/cyclic guanosine 3',5'-monophosphate/glutamate release cascade in nociceptive signaling (LI) [Kawamata and Omote], 1415

the alkyl chain dependence of the effect of normal alcohols on agonist-induced nicotinic acetylcholine receptor desensitization kinetics (LI) [Raines and Zachariah], 222

dibucaine and tetracaine inhibit the activation of mitogen-activated protein kinase mediated by L-type calcium channels in PC12 cells (LI) [Kansha et al.], 1798

direct inhibition of the N-methyl-D-aspartate receptor channel by high concentrations of opioids (LI) [Yamakura et al.], 1053

halothane and isoflurane increase spontaneous but reduce the N-methyl-D-aspartate-evoked dopamine release in rat striatal slices: evidence for direct presynaptic effects (LI) [Keita et al.], 1788

human neuronal nicotinic acetylcholine receptors expressed in *Xenopus* oocytes predict efficacy of halogenated compounds that disobey the Meyer-Overton rule (LI) [Cardoso et al.], 1370

local anesthetics inhibit muscarinic receptor-mediated activation of extracellular signal-regulated kinases in rat pheochromocytoma PC12 cells (LI) [Tan et al.], 1014

**Recombinant methods**

direct inhibition of the N-methyl-D-aspartate receptor channel by high concentrations of opioids (LI) [Yamakura et al.], 1053

human neuronal nicotinic acetylcholine receptors expressed in *Xenopus* oocytes predict efficacy of halogenated compounds that disobey the Meyer-Overton rule (LI) [Cardoso et al.], 1370

meperidine and lidocaine block of recombinant voltage-dependent Na<sup>+</sup> channels: evidence that meperidine is a local anesthetic (LI) [Wagner et al.], 1481

suppression of central nervous system sodium channels by propofol (LI) [Rehberg and Duch], 512

**Regional anesthesia and anesthetics.** See also **Local anesthesia and anesthetics**

Brown, Atlas of Regional Anesthesia, Second Edition (EM) [Weller], 1971

effects of perioperative analgesic technique on the surgical outcome and duration of rehabilitation after major knee surgery (CI) [Capdevila et al.], 8

French survey of anesthesia in 1996 (SA) [Clergue et al.], 1509

intravenous regional anesthesia using lidocaine and clonidine (CI) [Reuben et al.], 654

lumbar sympathetic blocks speed early and second stage induced labor in nulliparous women (CI) [Leighton et al.], 90:1039, [erratum] 602

major ambulatory surgery with continuous regional anesthesia and a disposable infusion pump (CR) [Klein et al.], 563

a new anterior approach to the sciatic nerve block (CI) [Chelly and Delaunay], 1655

no enhancement of sensory and motor blockade by neostigmine added to mepivacaine axillary plexus block (CI) [Bouaziz et al.], 78

pain: the past, present, and future of anesthesiology? (SA) [Cousins], 538

regional anesthesia and postoperative pain management: long-term benefits from a short-term intervention (EV) [Todd and Brown], 1

spinal antinociceptive effect of epidural nonsteroidal antiinflammatory drugs on nitric oxide-induced hyperalgesia in rats (LI) [Masue et al.], 198

**Remifentanyl**

effects of propofol and remifentanyl on phrenic nerve activity and nociceptive cardiovascular responses in rabbits (LI) [Ma et al.], 1470

**Renal function and disease.** See **Kidney function and disease**

**Reports of scientific meetings**

Eleventh International Symposium on Anesthesia and Intensive Care (SM) [Artru], 1970

Workshop on Safe Feedback Control of Anesthetic Drug Delivery (SM) [Glen et al.], 600

**Residency**

consistency, inter-rater reliability, and validity of 441 consecutive mock oral examinations in anesthesiology: implications for use as a tool for assessment of residents (SA) [Schubert et al.], 288

oral practice examinations: are they worth it? (EV) [James], 4

**Residual volume**

management of bladder function after outpatient surgery (CI) [Pavlin et al.], 42

**Respiration.** See **Lung, respiratory control; Lung function and disease**

**Respiratory failure.** See **Lung, respiratory failure**

**Respiratory muscle function and disease**

diaphragmatic activity after laparoscopic cholecystectomy (CI) [Sharma et al.], 406

**Resuscitation. See Cardiopulmonary resuscitation; Shock and resuscitation****Review article**

anticoagulation monitoring during cardiac surgery: a review of current and emerging techniques (RA) [Despotis et al.], 1122

**Reviews of educational material. See also Web site reviews**

Adams and Cashman (eds.), *Recent Advances in Anesthesia and Analgesia*, Number 20 (EM) [Tsen], 598

Barash et al., *Clinical Anesthesia*, 3rd Edition (EM) [Black], 1562

Barash et al. (eds.), *Handbook of Clinical Anesthesia*, 3rd Edition (EM) [Thomas], 332

Brown, *Atlas of Regional Anesthesia*, Second Edition (EM) [Weller], 1971

Cruickshank, *Mathematics and Statistics in Anaesthesia* (EM) [Shaffer], 1181

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Hurford et al., *Clinical Anesthesia Procedures of the Massachusetts General Hospital* (EM) [McCaslin], 1181

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McIntyre and Matsuki, *Tracheal Intubation: Theory and Practice* (EM) [Floyd], 1562

Miller and Muravchick (eds.), *Atlas of Anesthesia Volume V: Subspecialty Care* (EM) [Dean], 903

Schwid (ed.), *Sedation Simulator, CD-ROM Version 1.0 for Windows* (EM) [Bailey], 904

Stannard and Booth, *Churchill's Pocketbook of Pain* (EM) [Still], 332

Stoelting, *Pharmacology and Physiology in Anesthesia Practice*, 3rd Edition (EM) [Thomas], 597

Tobin (ed.), *Principles and Practice of Intensive Care Monitoring* (EM) [Breslow], 903

Waldman, *Atlas of Interventional Pain Management* (EM) [Staats], 597

Yao (ed.), *Yao & Artusio's Anesthesiology: Problem-oriented Patient Management* (EM) [Zornow], 1562

**Rhabdomyolysis**

noncardiogenic pulmonary edema and rhabdomyolysis after protamine administration in a patient with unrecognized McArthur's disease (CR) [Lobato et al.], 303

rhabdomyolysis after abdominal surgery in the hyperlordotic position enforced by pneumatic support (CR) [Uratsuji et al.], 310

**Rheology**

diaspirin cross-linked hemoglobin effectively restores pancreatic microcirculatory failure in hemorrhagic shock (LI) [von Dobschuetz et al.], 1754

**Risk and outcomes**

anesthetic management of the elderly: measuring function beyond the immediate perioperative horizon (EV) [Raja and Haythornthwaite], 909

assessment of the patient with cardiac disease: an anesthesiologist's paradigm (CCC) [Mangano], 1521

endovascular aortic aneurysm repair in a patient with prohibitive cardiopulmonary risk (CR) [Novak et al.], 1542

fast tracking into the new millennium: an evolving paradigm (EV) [London et al.], 911

incidence of spinal epidural abscess after epidural analgesia: a national 1-year survey (SA) [Wang et al.], 1928

nursing workload associated with adverse events in the postanesthesia care unit (EC) [Cohen et al.], 1882

randomized trial of hypotensive epidural anesthesia in older adults (CI) [Williams-Russo et al.], 926

risk factors of delayed extubation, prolonged length of stay in the intensive care unit, and mortality in patients undergoing coronary artery bypass graft with fast-track cardiac anesthesia: a new cardiac risk score (CI) [Wong et al.], 936

a simplified risk score for predicting postoperative nausea and vom-

iting: conclusions from cross-validations between two centers (CI) [Apfel et al.], 693

total blood transfusion and mortality after orthotopic liver transplantation (CO) [Schroeder et al.], 329

**Ritonavir**

ritonavir's role in reducing fentanyl clearance and prolonging its half-life (CI) [Oikkola et al.], 681

**Rocuronium**

do pipecuronium and rocuronium affect human bronchial smooth muscle? (CI) [Zappi et al.], 1616

intramuscular rocuronium in infants and children: a multicenter study to evaluate tracheal intubating conditions, onset, and duration of action (CI) [Kaplan et al.], 633

rapid tracheal intubation with rocuronium: a probability approach to determining dose (CI) [Kirkegaard-Nielsen et al.], 131

rocuronium-cisatracurium combinations (CO), [Donati and Plaud], 587, [Naguib], 588

**Ropivacaine**

caudal block in children: ropivacaine compared with bupivacaine (CI) [Khalil et al.], 1279

intrathecal ropivacaine for ambulatory surgery: a comparison between intrathecal bupivacaine and intrathecal ropivacaine for knee arthroscopy (CI) [Gautier et al.], 1239

a new anterior approach to the sciatic nerve block (CI) [Chelly and Delaunay], 1655

poor antibacterial effect of ropivacaine: comparison with bupivacaine (LR) [Pere et al.], 884

**E. A. Rovenstine Memorial Lecture**

pain: the past, present, and future of anesthesiology? (SA) [Cousins], 538

**Ryanodine receptor**

xenon does not trigger malignant hyperthermia in susceptible swine (LI) [Froeba et al.], 1047

**S****Safety. See Patient and physician safety****Sciatica**

treatment of lumbosacral radiculopathy with epidural steroids (CCC) [Abram], 1937

**Sciatic nerve block**

major ambulatory surgery with continuous regional anesthesia and a disposable infusion pump (CR) [Klein et al.], 563

**Scientific meetings. See Reports of scientific meetings****Sedation. See Premedication and sedation****Seizures and anticonvulsants**

epileptiform electroencephalogram during mask induction of anesthesia with sevoflurane (CI) [Yli-Hankala et al.], 1596

reverse arterial blood flow mediated local anesthetic central nervous system toxicity during axillary brachial plexus block (CO) [Dominguez and Garbaccio], 901

**Selectins**

tissue factor expression in vital organs during murine traumatic shock: role of transcription factors AP-1 and NF- $\kappa$ B (LI) [Armstrong et al.], 1844

**Sepsis and septic shock**

cecal ligation and puncture peritonitis model shows decreased nicotinic acetylcholine receptor numbers in rat muscle: immunopathologic mechanisms? (LI) [Tsukagoshi et al.], 448

congenital NOS2 deficiency protects mice from LPS-induced hyporesponsiveness to inhaled nitric oxide (LI) [Weimann et al.], 1744

growth of *Staphylococcus aureus* in Diprivan and Intralipid: implications on the pathogenesis of infections (LI) [Langevin et al.], 1394

- hemodynamic and metabolic manifestations of acute endotoxin infusion in pigs with and without the malignant hyperthermia mutation (LI) [Musley et al.], 833
- a new twist to myopathy of critical illness (EV) [Martyn and Vincent], 337
- pharmacokinetics and pharmacodynamics of vecuronium in rats with systemic inflammatory response syndrome: treatment with N<sup>G</sup>-monomethyl-L-arginine (LI) [Blobner et al.], 999
- selective iNOS inhibition attenuates acetylcholine- and bradykinin-induced vasoconstriction in lipopolysaccharide-exposed rat lungs (LI) [Fischer et al.], 1724
- Sevoflurane**
- additive contribution of nitrous oxide to sevoflurane minimum alveolar concentration for tracheal intubation in children (CI) [Swan et al.], 667
- anesthetic doses of sevoflurane to block cardiovascular responses to incision when administered with xenon or nitrous oxide (CI) [Nakata et al.], 369
- cardioprotective effects of propofol and sevoflurane in ischemic and reperfused rat hearts: role of K<sub>ATP</sub> channels and interaction with the sodium-hydrogen exchange inhibitor HOE 642 (cariporide) (LI) [Mathur et al.], 1349
- changes in electroencephalogram and autonomic cardiovascular activity during induction of anesthesia with sevoflurane compared with halothane in children (CI) [Constant et al.], 1604
- comparative pharmacodynamic modeling of the electroencephalography-slowing effect of isoflurane, sevoflurane, and desflurane (CI) [Rehberg et al.], 397
- compound A uptake and metabolism to mercapturic acids and 3,3,3-trifluoro-2-fluoromethoxypropanoic acid during low-flow sevoflurane anesthesia: biomarkers for exposure, risk assessment, and interspecies comparison (CI) [Kharasch and Juebert], 1267
- coupling of local cerebral blood flow to local cerebral glucose utilization during isoflurane and sevoflurane anesthesia (CO), [Archer and Pappius], 889, [Lenz et al.], 890
- differential effects of sevoflurane, isoflurane, and halothane on Ca<sup>2+</sup> release from the sarcoplasmic reticulum of skeletal muscle (LI) [Kunst et al.], 179
- direct cerebral vasodilatory effects of sevoflurane and isoflurane (CI) [Matta et al.], 677
- epileptiform discharges during 2 MAC sevoflurane anesthesia in two healthy volunteers (CR) [Kaisti et al.], 1952
- epileptiform electroencephalogram during mask induction of anesthesia with sevoflurane (CI) [Yli-Hankala et al.], 1596
- recovery profile, costs, and patient satisfaction with propofol and sevoflurane for fast-track office-based anesthesia (EC) [Tang et al.], 253
- sevoflurane increases lumbar cerebrospinal fluid pressure in normocapnic patients undergoing transsphenoidal hypophysectomy (CI) [Talke et al.], 127
- sevoflurane and isoflurane protect the reperfused guinea pig heart by reducing posts ischemic adhesion of polymorphonuclear neutrophils (LI) [Heindl et al.], 521
- sevoflurane mimics ischemic preconditioning effects on coronary flow and nitric oxide release in isolated hearts (LI) [Novalija et al.], 701
- sevoflurane reduces myocardial infarct size and decreases the time threshold for ischemic preconditioning in dogs (LI) [Toller et al.], 1437
- Shear force**
- different ventilation strategies affect lung function but do not increase tumor necrosis factor- $\alpha$  and prostacyclin production in lavaged rat lungs in vivo (LI) [Verbrugge et al.], 1834
- Shivering**
- postoperative pain facilitates nonthermoregulatory tremor (CI) [Horn et al.], 979
- shivering complicating the treatment of neurologically impaired surgical and intensive care unit patients (CR) [Keegan et al.], 874
- Shock and resuscitation**
- diaspirin cross-linked hemoglobin effectively restores pancreatic microcirculatory failure in hemorrhagic shock (LI) [von Dobschuetz et al.], 1754
- extreme intraoperative blood loss and hemodilution in a Jehovah's Witness: new aspects in postoperative management (CR) [Neff et al.], 1949
- fentanyl pharmacokinetics in hemorrhagic shock: a porcine model (LI) [Egan et al.], 156
- intestinal luminal microdialysis: a new approach to assess gut mucosal ischemia (LI) [Tenhunen et al.], 1807
- pharmacokinetics and pharmacodynamics of vecuronium in rats with systemic inflammatory response syndrome: treatment with N<sup>G</sup>-monomethyl-L-arginine (LI) [Blobner et al.], 999
- tissue factor expression in vital organs during murine traumatic shock: role of transcription factors AP-1 and NF- $\kappa$ B (LI) [Armstrong et al.], 1844
- Sildenafil**
- sildenafil ameliorates effects of inhaled nitric oxide withdrawal (CR) [Atz and Wessel], 307
- Skeletal muscle electrophysiology**
- differential effects of sevoflurane, isoflurane, and halothane on Ca<sup>2+</sup> release from the sarcoplasmic reticulum of skeletal muscle (LI) [Kunst et al.], 179
- meperidine and lidocaine block of recombinant voltage-dependent Na<sup>+</sup> channels: evidence that meperidine is a local anesthetic (LI) [Wagner et al.], 1481
- Skeletal muscle function and disease**
- cecal ligation and puncture peritonitis model shows decreased nicotinic acetylcholine receptor numbers in rat muscle: immunopathologic mechanisms? (LI) [Tsukagoshi et al.], 448
- differential effects of sevoflurane, isoflurane, and halothane on Ca<sup>2+</sup> release from the sarcoplasmic reticulum of skeletal muscle (LI) [Kunst et al.], 179
- a new twist to myopathy of critical illness (EV) [Martyn and Vincent], 337
- noncardiogenic pulmonary edema and rhabdomyolysis after protamine administration in a patient with unrecognized McArdle's disease (CR) [Lobato et al.], 303
- rhabdomyolysis after abdominal surgery in the hyperlordotic position enforced by pneumatic support (CR) [Uratsuji et al.], 310
- Smoking**
- exposure to cigarette smoke impairs alveolar macrophage functions during halothane and isoflurane anesthesia in rats (LI) [Kotani et al.], 1823
- Soda lime**
- Amsorb: a new carbon dioxide absorbent for use in anesthetic breathing systems (LI) [Murray et al.], 1342
- putting the brakes on anesthetic breakdown (EV) [Kharasch], 1192
- Sodium and sodium channels**
- local anesthetics inhibit muscarinic receptor-mediated activation of extracellular signal-regulated kinases in rat pheochromocytoma PC12 cells (LI) [Tan et al.], 1014
- meperidine and lidocaine block of recombinant voltage-dependent Na<sup>+</sup> channels: evidence that meperidine is a local anesthetic (LI) [Wagner et al.], 1481
- stereoselectivity of bupivacaine in local anesthetic-sensitive ion channels of peripheral nerve (LI) [Nau et al.], 786
- suppression of central nervous system sodium channels by propofol (LI) [Rehberg and Duch], 512

**Sodium nitroprusside.** See **Nitroglycerin and nitroprusside****Spectroscopy**

- correlation between cerebral oxygen saturation measured by near-infrared spectroscopy and jugular oxygen saturation in patients with severe closed head injury (CI) [Ter Minassian et al.], 985

**Spinal anesthesia and analgesia**

- aseptic meningitis after spinal anesthesia in an infant (CR) [Easley et al.], 305
- bupivacaine augments intrathecal fentanyl for labor analgesia (CI) [Palmer et al.], 84
- combined spinal-epidural analgesia in obstetrics (CCC) [Eisenach], 299, [erratum] 906
- effect of combined spinal-epidural ambulatory labor analgesia on balance (CI) [Pickering et al.], 436
- effects of crystalloid and colloid preload on blood volume in the parturient undergoing spinal anesthesia for elective cesarean section (CI) [Ueyama et al.], 1571
- epidural fibrin glue injection stops persistent postdural puncture headache (CR) [Crul et al.], 576
- intraoperative and postoperative analgesic efficacy and adverse effects of intrathecal opioids in patients undergoing cesarean section with spinal anesthesia: a qualitative and quantitative systematic review of randomized controlled trials (RA) [Dahl et al.], 1919
- intrathecal adenosine interacts with a spinal noradrenergic system to produce antinociception in nerve-injured rats (LI) [Gomes et al.], 1072
- intrathecal bupivacaine in humans: influence of volume and baricity of solutions (CI) [Malinovsky et al.], 1260
- intrathecal neostigmine and sufentanil for early labor analgesia (CI) [Nelson et al.], 1293
- intrathecal ropivacaine for ambulatory surgery: a comparison between intrathecal bupivacaine and intrathecal ropivacaine for knee arthroscopy (CI) [Gautier et al.], 1239
- is combined spinal-epidural analgesia associated with more rapid cervical dilation in nulliparous patients when compared with conventional epidural analgesia? (CI) [Tsen et al.], 920
- postpartum subdural hygroma after epidural analgesia (CR) [Verdú et al.], 867
- spinal hypotension associated with cesarean section: will preload ever work? (EV) [Rout and Rocke], 1565
- vagotonia and cardiac arrest during spinal anesthesia (CR) [Thrush and Downs], 1171

**Spinal cord, blood flow**

- direct effects of  $\alpha_1$ - and  $\alpha_2$ -adrenergic agonists on spinal and cerebral pial vessels in dogs (LI) [Iida et al.], 479

**Spinal cord electrophysiology**

- incision-induced changes in receptive field properties of rat dorsal horn neurons (LI) [Zahn and Brennan], 772

**Spinal cord function and disease**

- the analgesic action of nitrous oxide is dependent on the release of norepinephrine in the dorsal horn of the spinal cord (LI) [Zhang et al.], 1401
- analgesic interaction between intrathecal midazolam and glutamate receptor antagonists on thermal-induced pain in rats (LI) [Nishiyama et al.], 531
- antinociceptive and hemodynamic effects of a novel  $\alpha_2$ -adrenergic agonist, MPV-2426, in sheep (LI) [Eisenach et al.], 1425
- direct effects of  $\alpha_1$ - and  $\alpha_2$ -adrenergic agonists on spinal and cerebral pial vessels in dogs (LI) [Iida et al.], 479
- intrathecal drug therapy for chronic pain: from basic science to clinical practice (MI) [Dougherty and Staats], 1891
- isoflurane blunts electroencephalographic and thalamic-reticular formation responses to noxious stimulation in goats (LI) [Antognini and Carstens], 1770

- pain: the past, present, and future of anesthesiology? (SA) [Cousins], 538

- preclinical toxicity screening of intrathecal adenosine in rats and dogs (LI) [Chiari et al.], 824

- quantitative and qualitative effects of isoflurane on movement occurring after noxious stimulation (LI) [Antognini et al.], 1064

**Spinal cord injury**

- evaluation of tracheal intubation difficulty in patients with cervical spine immobilization: fiberoptic (WuScope) versus conventional laryngoscopy (CI) [Smith et al.], 1253
- preclinical toxicity screening of intrathecal adenosine in rats and dogs (LI) [Chiari et al.], 824

**Spirometry**

- the use of side-stream spirometry to assess air leak during and after lung volume reduction surgery (CR) [Robinson], 571

**Splanchnic circulation**

- diaspirin cross-linked hemoglobin effectively restores pancreatic microcirculatory failure in hemorrhagic shock (LI) [von Dobschuetz et al.], 1754
- effect of dobutamine on splanchnic carbohydrate metabolism and amino acid balance after cardiac surgery (CI) [Ensinger et al.], 1587
- intestinal luminal microdialysis: a new approach to assess gut mucosal ischemia (LI) [Tenhunen et al.], 1807

**Staffing.** See **Economics, management, and manpower****Statistics**

- Cruickshank, Mathematics and Statistics in Anaesthesia (EM) [Shaffer], 1181
- prediction bounds for case scheduling: interpret with caution (CO), [Dexter], 590, [Overdyk and Rust], 589
- statistical method to evaluate management strategies to decrease variability in operating room utilization (EC) [Dexter et al.], 262

**Stent graft**

- endovascular aortic aneurysm repair in a patient with prohibitive cardiopulmonary risk (CR) [Novak et al.], 1542

**Stereoisomers**

- ketamine distribution described by a recirculatory pharmacokinetic model is not stereoselective (LI) [Henthorn et al.], 1733
- pharmacokinetics of thiopental enantiomers during and following prolonged high-dose therapy (CI) [Cordato et al.], 1693
- stereoselectivity of bupivacaine in local anesthetic-sensitive ion channels of peripheral nerve (LI) [Nau et al.], 786

**Stomach function and disease**

- the esophageal detector device is unreliable when the stomach has been ventilated (CR) [Andres and Langenstein], 566
- gastric perforation associated with the use of celecoxib (CR) [Reuben and Steinberg], 1548

**Stress**

- hypothermia in barbiturate-anesthetized rats suppresses natural killer cell activity and compromises resistance to tumor metastasis: a role for adrenergic mechanisms (LI) [Ben-Eliyahu et al.], 732

**Subspecialty care**

- Miller and Muravchick (eds.), Atlas of Anesthesia Volume V: Subspecialty Care (EM) [Dean], 903

**Succinylcholine**

- comparison of the intubation conditions provided by rapacuronium (ORG 9487) or succinylcholine in humans during anesthesia with fentanyl and propofol (CI) [Fleming et al.], 1311
- delayed-onset epinephrine-induced pulmonary edema (CR) [Liu et al.], 1169
- evaluation of neuromuscular and cardiovascular effects of two doses of rapacuronium (ORG 9487) versus mivacurium and succinylcholine (CI) [Miguel et al.], 1648

- intramuscular rapacuronium in infants and children: dose-ranging and tracheal intubating conditions (CI) [Reynolds et al.], 1285  
the onset/offset profiles of rapacuronium and succinylcholine are not identical (CO) [Kopman], 1554  
succinylcholine hyperkalemia after burns (CO), [Gronert], 320, [Jeevendra Martyn], 321, [MacLennan et al.], 320  
an unexpected hyperkalemic response to succinylcholine during electroconvulsive therapy for catatonic schizophrenia (CR) [Cooper et al.], 574
- Sufentanil**  
alfentanil causes less postoperative nausea and vomiting than equipotent doses of fentanyl or sufentanil in outpatients (CI) [Langevin et al.], 1666  
intrathecal neostigmine and sufentanil for early labor analgesia (CI) [Nelson et al.], 1293
- Surgery. See also Postoperative care**  
effects of morphine and tramadol on somatic and visceral sensory function and gastrointestinal motility after abdominal surgery (CI) [Wilder-Smith et al.], 639  
management of post-thoracotomy pseudoangina and myofascial pain with botulinum toxin (CR) [Diaz and Gould], 877  
prediction bounds for case scheduling: interpret with caution (CO), [Dexter], 590, [Overdyk and Rust], 589  
a prospective randomized comparison of three blood conservation strategies for radical prostatectomy (CI) [Monk et al.], 24  
rhabdomyolysis after abdominal surgery in the hyperlordotic position enforced by pneumatic support (CR) [Uratsuji et al.], 310  
the use of side-stream spirometry to assess air leak during and after lung volume reduction surgery (CR) [Robinson], 571
- Sympathetic nervous system**  
anesthetic doses of sevoflurane to block cardiovascular responses to incision when administered with xenon or nitrous oxide (CI) [Nakata et al.], 369  
changes in electroencephalogram and autonomic cardiovascular activity during induction of anesthesia with sevoflurane compared with halothane in children (CI) [Constant et al.], 1604  
high thoracic epidural anesthesia does not inhibit sympathetic nerve activity in the lower extremities (CI) [Magnúsdóttir et al.], 1299  
lumbar sympathetic blocks speed early and second stage induced labor in nulliparous women (CI) [Leighton et al.], 90:1039, [erratum] 602  
specific actions of halothane, isoflurane, and desflurane on sympathetic activity and A $\delta$  and C somatosympathetic reflexes recorded in renal nerves in dogs (LI) [Pac-Soo et al.], 470
- Synaptic transmission**  
barbiturates and the brain: disrupting the delicate balance (EV) [Pearce], 1190
- Systemic lupus erythematosus**  
anesthetic management of the parturient with systemic lupus erythematosus, pulmonary hypertension, and pulmonary edema (CR) [Cuenca et al.], 568
- T**
- Temperature regulation and management**  
deep hypothermia and rewarming alters glutamate levels and glycogen content in cultured astrocytes (LI) [Bissonnette et al.], 1763  
hemodynamic and metabolic manifestations of acute endotoxin infusion in pigs with and without the malignant hyperthermia mutation (LI) [Musley et al.], 833  
hypothermia in barbiturate-anesthetized rats suppresses natural killer cell activity and compromises resistance to tumor metastasis: a role for adrenergic mechanisms (LI) [Ben-Eliyahu et al.], 732  
new temperature monitoring guidelines: an observation and caveat (CO) [Ward], 325  
postoperative pain facilitates nonthermoregulatory tremor (CI) [Horn et al.], 979  
relative contribution of skin and core temperatures to vasoconstriction and shivering thresholds during isoflurane anesthesia (CI) [Lenhardt et al.], 422  
shivering complicating the treatment of neurologically impaired surgical and intensive care unit patients (CR) [Keegan et al.], 874  
thermoregulatory thresholds for vasoconstriction in patients anesthetized with various 1-minimum alveolar concentration combinations of xenon, nitrous oxide, and isoflurane (CI) [Goto et al.], 626
- Tension pneumothorax**  
tension pneumothorax and apnea tests (CO) [Zisfein and Marks], 326  
tension pneumothorax complicating jet ventilation via a Cook airway exchange catheter (CR) [Baraka], 557
- Teratogenicity**  
management of anesthesia for the pregnant surgical patient (CCC) [Rosen], 1159
- Testing**  
consistency, inter-rater reliability, and validity of 441 consecutive mock oral examinations in anesthesiology: implications for use as a tool for assessment of residents (SA) [Schubert et al.], 288  
oral practice examinations: are they worth it? (EV) [James], 4
- Tetracaine**  
dibucaine and tetracaine inhibit the activation of mitogen-activated protein kinase mediated by L-type calcium channels in PC12 cells (LI) [Kansha et al.], 1798
- Tetralogy of Fallot**  
noncardiogenic pulmonary edema and rhabdomyolysis after protamine administration in a patient with unrecognized McArdule's disease (CR) [Lobato et al.], 303
- Thiopental**  
pharmacokinetics of thiopental enantiomers during and following prolonged high-dose therapy (CI) [Cordato et al.], 1693
- Thoracic anesthesia**  
how to perform differential lung ventilation in pediatric cases? (CO) [Tsujiyama et al.], 327  
signal-averaged P-wave duration does not predict atrial fibrillation after thoracic surgery (CI) [Amar et al.], 16  
the use of side-stream spirometry to assess air leak during and after lung volume reduction surgery (CR) [Robinson], 571
- Thyroid shield**  
a thyroid shield can correct a laryngeal mask airway air leak (CO) [Hall], 1558
- Tic doloureux**  
idiopathic trigeminal neuralgia associated with a severe atypical facial pain exacerbated by hydrocephalus (CO) [Iseki et al.], 1968
- Tirofiban**  
preoperative use of enoxaparin and tirofiban: possible association with increased bleeding postbypass (CR) [Skubas et al.], 869
- Tolerance**  
immunomodulatory aspects of transfusion: a once and future risk? (CCC) [Klein], 861
- Tort law**  
the legal system and patient safety: charting a divergent course: the relationship between malpractice litigation and human errors (EV) [Liang and Cullen], 609
- Toxicity, drug. See Drug toxicity**
- Tracheoesophageal fistula**  
the intraoperative diagnosis of a tracheoesophageal fistula in an adult (CR) [Finkelstein], 1946

**Trademark**

trademark? (CO), [Sessler], 583

**Tramadol**

effects of morphine and tramadol on somatic and visceral sensory function and gastrointestinal motility after abdominal surgery (CI) [Wilder-Smith et al.], 639

**Transcranial Doppler**

cerebral microembolism diagnosed by transcranial Doppler during total knee arthroplasty: correlation with transesophageal echocardiography (CI) [Sulek et al.], 672

direct cerebral vasodilatory effects of sevoflurane and isoflurane (CI) [Matta et al.], 677

**Transcutaneous electrical nerve stimulation**

effect of the duration of electrical stimulation on the analgesic response in patients with low back pain (CI) [Hamza et al.], 1622

effect of the frequency of transcutaneous electrical nerve stimulation on the postoperative opioid analgesic requirement and recovery profile (CI) [Hamza et al.], 1232

**Transesophageal echocardiography. See Echocardiography****Transplantation**

circulatory failure after anesthesia induction in a patient with severe primary pulmonary hypertension (CR) [Höhn et al.], 1943

ethical conflicts (EV) [Rosenbaum], 3

a matter of life and death: what every anesthesiologist should know about the medical, legal, and ethical aspects of declaring brain death (RA) [Van Norman], 275

**Trauma care**

liquid ventilation: a theoretically beneficial approach in treating systemic air embolism in lung trauma (CO) [Schulz-Stübner], 1963

minimizing venous air embolism from reinfusion bags (CO), [Benumof], 1962

tissue factor expression in vital organs during murine traumatic shock: role of transcription factors AP-1 and NF- $\kappa$ B (LI) [Armstead et al.], 1844

**Tremor**

postoperative pain facilitates nonthermoregulatory tremor (CI) [Horn et al.], 979

**Trigeminal neuralgia**

idiopathic trigeminal neuralgia associated with a severe atypical facial pain exacerbated by hydrocephalus (CO) [Iseki et al.], 1968

**Tumor necrosis factor**

the role of tumor necrosis factor- $\alpha$  in the pathogenesis of aspiration pneumonia in rats (LI) [Davidson et al.], 486

volatile anesthetics augment expression of proinflammatory cytokines in rat alveolar macrophages during mechanical ventilation (LI) [Kotani et al.], 187

**U****Ulnar nerve**

ulnar nerve pressure: influence of arm position and relationship to somatosensory evoked potentials (CI) [Prielipp et al.], 345

will we ever understand perioperative neuropathy? a fresh approach offers hope and insight (EV) [Caplan], 335

**Ultrasound**

cerebral microembolism diagnosed by transcranial Doppler during total knee arthroplasty: correlation with transesophageal echocardiography (CI) [Sulek et al.], 672

correlation between cerebral oxygen saturation measured by near-infrared spectroscopy and jugular oxygen saturation in patients with severe closed head injury (CI) [Ter Minassian et al.], 985

direct cerebral vasodilatory effects of sevoflurane and isoflurane (CI) [Matta et al.], 677

management of bladder function after outpatient surgery (CI) [Pavlin et al.], 42

ultrasound-guided internal jugular venous cannulation in infants: a prospective comparison with the traditional palpation method (CI) [Verghese et al.], 71

**Urinary retention**

management of bladder function after outpatient surgery (CI) [Pavlin et al.], 42

**V****Vagotonia**

vagotonia and cardiac arrest during spinal anesthesia (CR) [Thrush and Downs], 1171

**Vallecular cyst**

unanticipated difficult intubation as a result of an asymptomatic vallecular cyst (CR) [Kamble et al.], 872

**Values**

the importance of professional obligations: nonpatient care obligations of anesthesiologists (EV) [Neeld], 915

nonpatient care obligations of anesthesiologists (SA) [Waisel], 1152

**Valvular heart disease**

systolic anterior motion of the anterior mitral leaflet after heart transplantation (CR) [Chatel et al.], 1535

**Vascular endothelium**

anesthetic preconditioning: not just for the heart? (EV) [Lynch], 606

effects of hypoxia-reoxygenation on microvascular endothelial function in the rat hippocampal slice (LI) [Staunton et al.], 1462

inhibitory effects of propofol on acetylcholine-induced endothelium-dependent relaxation and prostacyclin synthesis in rabbit mesenteric resistance arteries (LI) [Yamashita et al.], 1080

microcirculatory basis for nonuniform flow delivery with intravenous nitroprusside (LI) [Mustafa et al.], 723

**Vascular physiology and pharmacology**

diaspirin cross-linked hemoglobin effectively restores pancreatic microcirculatory failure in hemorrhagic shock (LI) [von Dobschuetz et al.], 1754

effect of isoflurane on in situ vascular smooth muscle transmembrane potential in spontaneous hypertension (LI) [Stekiel et al.], 207

effects of hypoxia-reoxygenation on microvascular endothelial function in the rat hippocampal slice (LI) [Staunton et al.], 1462

inhibitory effects of propofol on acetylcholine-induced endothelium-dependent relaxation and prostacyclin synthesis in rabbit mesenteric resistance arteries (LI) [Yamashita et al.], 1080

ketamine preserves and propofol potentiates hypoxic pulmonary vasoconstriction compared with the conscious state in chronically instrumented dogs (LI) [Nakayama and Murray], 760

microcirculatory basis for nonuniform flow delivery with intravenous nitroprusside (LI) [Mustafa et al.], 723

relative contribution of skin and core temperatures to vasoconstriction and shivering thresholds during isoflurane anesthesia (CI) [Lenhardt et al.], 422

selective iNOS inhibition attenuates acetylcholine- and bradykinin-induced vasoconstriction in lipopolysaccharide-exposed rat lungs (LI) [Fischer et al.], 1724

thermoregulatory thresholds for vasoconstriction in patients anesthetized with various 1-minimum alveolar concentration combinations of xenon, nitrous oxide, and isoflurane (CI) [Goto et al.], 626

**Vascular smooth muscle**

effect of isoflurane on in situ vascular smooth muscle transmembrane potential in spontaneous hypertension (LI) [Stekiel et al.], 207

**Vascular surgery**

endovascular aortic aneurysm repair in a patient with prohibitive cardiopulmonary risk (CR) [Novak et al.], 1542

probable carbon dioxide embolism during endoscopically assisted varicose vein stripping (CR) [Vidovich and Lojeski], 1527

# **Vecuronium**

pharmacokinetics and pharmacodynamics of vecuronium in rats with systemic inflammatory response syndrome: treatment with N<sup>G</sup>-monomethyl-L-arginine (LI) [Blobner et al.], 999

# **Ventilation**

a hairy situation (CO) [Johnson et al.], 595

how to perform differential lung ventilation in pediatric cases? (CO) [Tsujimoto et al.], 327

preoxygenation: best method for both efficacy and efficiency? (EV) [Benumof], 603

preoxygenation: comparison of maximal breathing and tidal volume breathing techniques (CI) [Baraka et al.], 612

vaporized perfluorocarbon: taking the "liquid" out of liquid ventilation (EV) [Warner], 340

vaporized perfluorocarbon improves oxygenation and pulmonary function in an ovine model of acute respiratory distress syndrome (LI) [Bleil et al.], 461

# **Ventilation, mechanical. See Mechanical ventilation**

# **Ventilatory control. See also Lung, respiratory control**

combined spinal-epidural analgesia in obstetrics (CCC) [Eisenach], 299, [erratum] 906

positive end-expiratory pressure improves respiratory function in obese but not in normal subjects during anesthesia and paralysis (CI) [Pelosi et al.], 1221

respiratory mechanics during xenon anesthesia in pigs: comparison with nitrous oxide (LI) [Calzia et al.], 1378

# **Volatile anesthetics. See Gas anesthesia and anesthetics; Inhalation anesthesia and anesthetics**

# **Vomiting. See Nausea, vomiting, and antiemetics**

## **W**

# **Waste gases and scavenging**

causes of nitrous oxide contamination in operating rooms (CO), [Byhahn and Westphal], 1960, [Kanmura], 1961

# **Web site reviews. See also Internet; Reviews of educational material**

Hewlett Packard Anesthesiology Village (WS) [Ting], 1183

# **Withdrawal, drug. See Drug abuse, addiction, and withdrawal**

# **Women's health**

sex differences in cholinergic analgesia I: a supplemental nicotinic mechanism in normal females (LI) [Chiari et al.], 1447

sex differences in cholinergic analgesia II: differing mechanisms in two models of allodynia (LI) [Lavand'homme and Eisenach], 1455

## **X**

# **Xenon**

anesthetic doses of sevoflurane to block cardiovascular responses to incision when administered with xenon or nitrous oxide (CI) [Nakata et al.], 369

respiratory mechanics during xenon anesthesia in pigs: comparison with nitrous oxide (LI) [Calzia et al.], 1378

thermoregulatory thresholds for vasoconstriction in patients anesthetized with various I-minimum alveolar concentration combinations of xenon, nitrous oxide, and isoflurane (CI) [Goto et al.], 626

xenon does not trigger malignant hyperthermia in susceptible swine (LI) [Froebe et al.], 1047

## **Z**

# **Zapol, Warren**

Warren Zapol: true-life adventures in science, medicine, and innovation: recipient of the 1999 Excellence in Research Award [Lowenstein], 917

## AUTHOR INDEX TO VOLUME 91

## A

- Abalos, Amy, *see* Lien, Cynthia A.
- Abram, Stephen E.: Treatment of Lumbosacral Radiculopathy with Epidural Steroids, 1937
- Adnet, Frédéric, Borron, Stephen W., Lapos-tolle, Frédéric, Lapandry, Claude: The Three Axis Alignment Theory and the "Sniffing Position:" Perpetuation of an Anatomic Myth?, 1964
- Ahmed, Hesham E., *see* Hamza, Mohamed A.
- Akça, Ozan, Podolsky, Andrea, Eisenhuber, Edith, Panzer, Oliver, Hetz, Hubert, Lampl, Karl, Lackner, Franz X., Wittmann, Karin, Grabenwoeger, Florian, Kurz, Andrea, Schultz, Anette-Marie, Negishi, Chiharu, Sessler, Daniel L.: Comparable Post-operative Pulmonary Atelectasis in Patients Given 30% or 80% Oxygen during and 2 Hours after Colon Resection, 991
- Albrecht, Michael, *see* Bleyl, Jörg U.
- Alhava, Esko, *see* Tenhunen, Jyrki J.
- Alonso, Benjamin, *see* Verdú, Maria Teresa
- Alves, Diane, *see* Palmer, Craig M.
- Amar, David, Roistacher, Nancy, Zhang, Hao, Baum, Michael S., Ginsburg, Ilana, Steinberg, Jonathan S.: Signal-averaged P-wave Duration Does Not Predict Atrial Fibrillation after Thoracic Surgery, 16
- am Esch, Jochen Schulte, *see* Horn, Ernst-Peter
- Ammar, Tameshwar, *see* Shore-Lesserson, Linda
- Andres, Alexander H., Langenstein, Holger: The Esophageal Detector Device Is Unreliable When the Stomach Has Been Ventilated, 566
- Andriole, Gerald L., *see* Monk, Terri G.
- Angst, Martin S., Brose, William G., Dyck, John B.: The Relationship between the Visual Analog Pain Intensity and Pain Relief Scale Changes during Analgesic Drug Studies in Chronic Pain Patients, 34
- Antkowiak, Bernd: Different Actions of General Anesthetics on the Firing Patterns of Neocortical Neurons Mediated by the GABA<sub>A</sub> Receptor, 500
- Antognini, Joseph F., Carstens, E.: Isoflurane Blunts Electroencephalographic and Thalamic-Reticular Formation Responses to Noxious Stimulation in Goats, 1770
- Antognini, Joseph F., Wang, Xiao Wei, Carstens, E.: Quantitative and Qualitative Effects of Isoflurane on Movement Occurring after Noxious Stimulation, 1064
- Aouad, Marie T., *see* Baraka, Anis S.
- Aoyama, Kazuyoshi, Seto, Atsushi, Tak-enaka, Ichiro: Simple Modification of the Ovassapian Fiberoptic Intubating Airway, 897
- Apfel, Christian C., Läärä, Esa, Koivuranta, Merja, Greim, Clemens-A., Roewer, Norbert: A Simplified Risk Score for Predicting Postoperative Nausea and Vomiting: Conclusions from Cross-validations between Two Centers, 693
- Archer, David P., Pappius, Hanna M.: Coupling of Local Cerebral Blood Flow to Local Cerebral Glucose Utilization during Isoflurane and Sevoflurane Anesthesia, 889
- Arends, Rosalin H., *see* Pavlin, D. Janet
- Armstead, Valerie E., Opentanova, Irina L., Minchenko, Alexander G., Lefer, Allan M.: Tissue Factor Expression in Vital Organs during Murine Traumatic Shock: Role of Transcription Factors AP-1 and NF- $\kappa$ B, 1844
- Artru, Alan A.: Eleventh International Symposium on Anesthesia and Intensive Care, 1970
- Asai, Takashi: Use of the Endotrol Endotracheal Tube and a Light Wand for Blind Nasotracheal Intubation, 1557
- Asai, Takashi: Use of the Laryngeal Mask for Exchange of Orotracheal Tubes, 1167
- Asano, Toshio, *see* Masue, Tatsuhiko
- Asirvatham, Samuel J.: In Reply, 584
- Atz, Andrew M., Wessel, David L.: Sildenafil Ameliorates Effects of Inhaled Nitric Oxide Withdrawal, 307
- Auden, Steve M.: Cervical Spine Instability and Dwarfism: Fiberoptic Intubations for All, 580
- Auroy, Yves, *see* Clergue, François
- Avram, Michael J., *see* Henthorn, Thomas K.
- Axelsson, Hans, *see* Sharma, Rajiv R.
- Aya, Antoine G., de la Coussaye, Jean E., Robert, Emmanuelle, Ripart, Jacques, Lefrant, Jean-Yves, Fabbro-Péray, Pascale, Eledjam, Jean-Jacques: Effects of Halothane and Enflurane on Ventricular Conduction, Refractoriness, and Wavelength: A Concentration-Response Study in Isolated Hearts, 1873
- Aya, Antoine G. M., Saissi, Gilbert, Eledjam, Jean-Jacques: *In Situ* Pulmonary Thrombolysis Using Recombinant Tissue Plasminogen Activator after Cesarean Delivery, 578

## B

- Babacan, Avni, *see* Ozturk, Ertan
- Bäder, Stefan, *see* Calzia, Enrico
- Baeder, Stefan, *see* Froeba, Gebhard
- Bailey, Peter L.: *Sedation Simulator, CD-ROM Version 1.0 for Windows*. Edited by Howard Schwid, 904
- Bailey, Peter L., *see* Egan, Talmage D.
- Bailin, Michael, *see* Nguyen, Luat
- Balatbat, Joselito T., Stocking, John E., Rigor, Benjamin M.: Controlled Intermit-tent Aerosolization of Lidocaine for Airway Anesthesia, 596
- Balser, Jeffrey R., *see* Rosenfeld, Brian A.
- Baraka, Anis S.: Tension Pneumothorax Complicating Jet Ventilation *via* a Cook Airway Exchange Catheter, 557
- Baraka, Anis S., Taha, Samar K., Aouad, Marie T., El-Khatib, Mohamad F., Kawka-bani, Nadine I.: Preoxygenation: Compar-ison of Maximal Breathing and Tidal Volume Breathing Techniques, 612
- Bardenheuer, Hubert J., *see* Weigand, Markus A.
- Baribault, Jean-Pierre, *see* Langevin, Stephan
- Barkowski, Richard, *see* Miguel, Rafael
- Barthelet, Yves, *see* Capdevila, Xavier
- Bastanmehr, Hiva, *see* Lenhardt, Rainer
- Baumann, Patricia L., *see* Cooper, Robert C.
- Baumert, Jan Hinrich, *see* Max, Martin
- Baum, Michael S., *see* Amar, David
- Baum, Victor C.: Trademark?, 582
- Baur, Christoph, *see* Froeba, Gebhard
- Beaufort, Ton. M., *see* Proost, Johannes H.
- Becker, Bernhard F., *see* Heindl, Bernhard
- Bedi, Amit, *see* Murray, James M.
- Beebe, David S., *see* Musley, Shailesh Kumar V.
- Beilin, Ben Zion, *see* Ben-Eliyahu, Shamgar
- Belani, Kumar, Ozaki, Makoto, Hynson, James, Hartmann, Thomas, Reyford, Hugo, Martino, Jean-Marc, Poliac, Marius, Miller, Ronald: A New Noninvasive Method to Measure Blood Pressure: Results of a Multicenter Trial, 686
- Belani, Kumar G., *see* Musley, Shailesh Kumar V.
- Bell, Dean D., *see* Gall, Richard
- Bellows, Wayne H., *see* Romson, Joseph L.
- Belmont, Matthew R., *see* Lien, Cynthia A.
- Benavente, María A., *see* Sánchez-Guijo, Juan J.
- Ben-Eliyahu, Shamgar, Shakh, Guy, Rosenne, Ella, Levinson, Yuri, Beilin, Ben-zion: Hypothermia in Barbiturate-anesthetized Rats Suppresses Natural Killer Cell Activity and Compromises Resistance to Tumor Metastasis: A Role for Adrenergic Mechanisms, 732
- Benhamou, Dan, *see* Bouaziz, Hervé
- Bennett, Gary J., *see* Byas-Smith, Michael G.
- Bennett, Judy, *see* Prielipp, Richard C.
- Benumof, Jonathan L.: Airway Exchange Catheters: Simple Concept, Potentially Great Danger, 342
- Benumof, Jonathan L.: Minimizing Venous Air Embolism from Reinfusion Bags, 1962
- Benumof, Jonathan L.: Preoxygenation: Best Method for Both Efficacy and Efficiency?, 603
- Benumof, Jonathan L., *see* Chee, Won K.; *also see* Ozer, Steven
- Benzing, Albert, Loop, Torsten, Mols, Georg, Geiger, Klaus: Unintended Inhalation of Nitric Oxide by Contamination of Compressed Air: Physiologic Effects and Interference with Intended Nitric Oxide Inhalation in Acute Lung Injury, 945
- Benzon, Honório T., Wong, Hak Y., Sid-diqui, Talha, Ondra, Stephen: Caution in Performing Epidural Injections in Patients on Several Antiplatelet Drugs, 1558
- Bernards, Christopher M., Kopacz, Dan J.: Effect of Epinephrine on Lidocaine Clearance *In Vivo*: A Microdialysis Study in Humans, 962

## AUTHOR INDEX TO VOLUME 91

- Berry, Peter D., *see* Kirkegaard-Nielsen, Hans
- Bevan, David R., *see* Purdy, Robert
- Beydon, Laurent, *see* Minassian, Aram Ter
- Biboulet, Philippe, *see* Capdevila, Xavier
- Bigatello, Luca M., Hurford, William E., Pesenti, Antonio: Ventilatory Management of Severe Acute Respiratory Failure for the Year 2000, 1567
- Birck, Katrin M., *see* Spahn, Donat R.
- Bissonnette, Bruno, Pellerin, Luc, Ravussin, Patrick, Daven, Véronique B., Magistretti, Pierre J.: Deep Hypothermia and Rewarming Alters Glutamate Levels and Glycogen Content in Cultured Astrocytes, 1763
- Black, Susan: *Clinical Anesthesia, 3rd Edition*. By Paul G. Barash, Bruce F. Cullen, and Robert K. Stoelting, 1562
- Blackley, Brian, *see* Gall, Richard
- Blatman, Robert, *see* Segal, Scott
- Blatt, Jonathan M.: At-home Recovery after an Anesthetic, 887
- Bleyl, Jörg U., Ragaller, Maximilian, Tschö, Uwe, Regner, Mike, Kanzow, Maria, Hübner, Matthias, Rasche, Stefan, Albrecht, Michael: Vaporized Perfluorocarbon Improves Oxygenation and Pulmonary Function in an Ovine Model of Acute Respiratory Distress Syndrome, 461
- Blobner, Manfred, Kochs, Eberhard, Fink, Heidrun, Mayer, Barbara, Veihermann, Andreas, Brill, Thomas, Stadler, Josef: Pharmacokinetics and Pharmacodynamics of Vecuronium in Rats with Systemic Inflammatory Response Syndrome: Treatment with  $N^G$ -Monomethyl-L-Arginine, 999
- Bloch, Kenneth D., *see* Holzmänn, Alexandra; *also see* Weimann, Jörg
- Blood, Todd, *see* Johnson, Joel O.
- Blust, Michael, *see* Nguyen, Luat
- Bobela, Iwona, *see* Nader, Nader D.
- Bodian, Carol, *see* Zaugg, Michael
- Boer, Fred, *see* Kuipers, Jette A.
- Borron, Stephen W., *see* Adnet, Frédéric
- Bosnjak, Zeljko J., *see* Stekiel, Thomas A.
- Bottino, Nicola, *see* Pelosi, Paolo
- Bouaziz, Hervé, Paqueron, Xavier, Bur, Marie Lorraine, Merle, Michel, Laxenaire, Marie Claire, Benhamou, Dan: No Enhancement of Sensory and Motor Blockade by Neostigmine Added to Mepivacaine Axillary Plexus Block, 78
- Bouchot, Olivier, *see* Malinovsky, Jean-Marc
- Bouillon, Thomas, Schmidt, Christina, Garstka, Gudrun, Heimbach, Dirk, Stafförst, Dieter, Schwilden, Helmut, Hoesft, Andreas: Pharmacokinetic-Pharmacodynamic Modeling of the Respiratory Depressant Effect of Alfentanil, 144
- Bouillon, Thomas, *see* Rehberg, Benno
- Bovill, James G., *see* Kuipers, Jette A.
- Boylan, John F., Sandler, Alan N.: In Reply, 317
- Bradway, James A., *see* Johnson, Joel O.
- Bräu, Michael E., *see* Nau, Carla
- Brecher, Mark E., *see* Monk, Terri G.
- Brennan, Timothy J., *see* Zahn, Peter K.
- Breslow, Michael J.: *Principles and Practice of Intensive Care Monitoring*. Edited by Martin J. Tobin, 903
- Brill, Thomas, *see* Blobner, Manfred
- Brimacombe, Joseph, Keller, Christian
- Brock-Utne, Arne J., *see* Brodsky, Jay B.
- Brodsky, Jay B., Brock-Utne, Arne J., Levi, David C., Ikonomidis, John S., Whyte, Richard I.: Pulmonary Aspiration of a Milk/Cream Mixture, 1533
- Bronstein, Merrill, *see* Romson, Joseph L.
- Brose, William G., *see* Angst, Martin S.
- Brown, David L., *see* Todd, Michael M.
- Brown, Ronald, *see* Reynolds, Lynne M.
- Brozowski, Susan J., *see* Cardoso, Rita A.
- Brune, Kay, *see* Muth-Selbach, Uta S.
- Buckley, Norm, Korz, Linda: TITLE, 1959
- Burguillos, Sebastian, *see* Verdú, Maria Teresa
- Burm, Anton G. L., *see* Kuipers, Jette A.
- Bur, Marie Lorraine, *see* Bouaziz, Hervé
- Burns, David D., *see* Dexter, Franklin
- Butterworth, John, *see* Prielipp, Richard C.
- Byas-Smith, Michael G., Bennett, Gary J., Gracely, Richard H., Max, Mitchell B., Robinovitz, Elaine, Dubner, Ronald: Tourniquet Constriction Exacerbates Hyperalgesia-related Pain Induced by Intradermal Capsaicin Injection, 617
- Byhahn, Christian, Westphal, C. Klaus: Causes of Nitrous Oxide Contamination in Operating Rooms, 1960

## C

- Cairns, Brian E., McErlane, Shelly A., Frangos, Miguel C., Soja, Peter J.: Tooth Pulp and Facial Hair Mechanoreceptor-evoked Responses of Trigeminal Sensory Neurons Are Attenuated during Ketamine Anesthesia, 1025
- Cairo, Sesto, *see* Myles, Paul S.
- Caldwell, James E., *see* Fleming, Neal W.; *also see* Kirkegaard-Nielsen, Hans; *also see* Talker, Pekka
- Calzia, Enrico, Stahl, Wolfgang, Handschuh, Thomas, Marx, Thomas, Fröba, Gebhardt, Bäder, Stefan, Georgieff, Michael, Radermacher, Peter: Respiratory Mechanics during Xenon Anesthesia in Pigs: Comparison with Nitrous Oxide, 1378
- Calzia, Enrico, *see* Froeba, Gebhard
- Campos, Carlos, *see* Khalil, Samia
- Capdevila, Xavier, Barthelet, Yves, Biboulet, Philippe, Ryckwaert, Yves, Rubenovitch, Josh, d'Athis, Françoise: Effects of Perioperative Analgesic Technique on the Surgical Outcome and Duration of Rehabilitation after Major Knee Surgery, 8
- Caplan, Robert A.: Will We Ever Understand Perioperative Neuropathy? A Fresh Approach Offers Hope and Insight, 335
- Caplan, Robert A., *see* Domino, Karen B.
- Cardoso, Rita A., Yamakura, Tomohiro, Bro-

- zowski, Susan J., Chavez-Noriega, Laura E., Harris, R. Adron: Human Neuronal Nicotinic Acetylcholine Receptors Expressed in *Xenopus* Oocytes Predict Efficacy of Halogenated Compounds That Disobey the Meyer-Overton Rule, 1370
- Carroll-Munro, Jo, *see* Wong, David T.
- Carstens, E., *see* Antognini, Joseph F.; *also see* Antognini, Joseph F.
- Cason, Brian A., *see* Ismael, Mohamed S.
- Casta, Alfonso: Attempted Placement of a Thoracic Epidural Catheter via the Caudal Route in a Newborn, 1965
- Catalona, William J., *see* Monk, Terri G.
- Chakrabarti, Mihir K., *see* Ma, Daqing; *also see* Pac-Soo, Chen K.
- Chandhok, Dharmender, Vijayakumar, Elamanna: An Unusual Case of Epidural Catheter Obstruction, 895
- Chan, Vincent, *see* Fleming, Neal W.
- Charles, Florence, *see* Malinovsky, Jean-Marc
- Chartrand, Daniel, *see* Choinière, Manon
- Chatel, Didier, Paquin, Sandrine, Oroudji, Mohammad, Provencher, Sophie, Plantefeve, Gaetan, Philip, Ivan: Systolic Anterior Motion of the Anterior Mitral Leaflet after Heart Transplantation, 1535
- Chavez-Noriega, Laura E., *see* Cardoso, Rita A.
- Chee, Won K., Benumof, Jonathan L.: In Reply, 889
- Chelly, Jacques E., Delaunay, Laurent: A New Anterior Approach to the Sciatic Nerve Block, 1655
- Cheney, Frederick W.: The American Society of Anesthesiologists Closed Claims Project: What Have We Learned, How Has It Affected Practice, and How Will It Affect Practice in the Future?, 552
- Cheney, Frederick W., *see* Domino, Karen B.
- Cheng, Davy C. H., *see* Preisman, Sergey; *also see* Wong, David T.
- Cheng, Jen-Kun, *see* Eisenach, James C.
- Chen, Lei, *see* Tang, Jun
- Chiari, Astrid, Lorber, Christine, Eisenach, James C., Wildling, Eckart, Krenn, Claus, Zavrsky, Ana, Kainz, Christian, Germann, Peter, Klimscha, Walter: Analgesic and Hemodynamic Effects of Intrathecal Clonidine as the Sole Analgesic Agent during First Stage of Labor: A Dose-Response Study, 388
- Chiari, Astrid, Tobin, Joseph R., Pan, Hui-Lin, Hood, David D., Eisenach, James C.: Sex Differences in Cholinergic Analgesia I: A Supplemental Nicotinic Mechanism in Normal Females, 1447
- Chiari, Astrid, Yaksh, Tony L., Myers, Robert R., Provencher, Jean, Moore, Lisa, Lee, Choong-Sik, Eisenach, James C.: Preclinical Toxicity Screening of Intrathecal Adenosine in Rats and Dogs, 824
- Chien, Chin-Sung, *see* Lin, Chih-Chung
- Ching, Joan M., *see* Fitzgibbon, Dermot R.
- Chiu, Chi-Tso, *see* Lin, Chih-Chung

## AUTHOR INDEX TO VOLUME 91

- Choinière, Manon, Rittenhouse, Brian E., Chartrand, Daniel: In Reply, 892
- Chortkoff, Ben S., see Dutton, Robert C.
- Chuang, Alice, see Khalil, Samia
- Chung, Frances, see Fleming, Neal W.; also see Sinclair, David R.
- Cicutti, Nicholas, see Fleming, Neal W.
- Clarke, Chris, see Kaplan, Richard F.
- Clergue, François, Auroy, Yves, Péquignot, François, Jougla, Eric, Lienhart, André, Laxenaire, Marie-Claire: French Survey of Anesthesia in 1996, 1509
- Clergue, François, see Sharma, Rajiv R.
- Cohen, Marsha M., O'Brien-Pallas, Linda L., Copplestone, Christine, Wall, Ronald, Porter, Joan, Rose, D. Keith: Nursing Workload Associated with Adverse Events in the Postanesthesia Care Unit, 1882
- Cohen, Peter J.: Ethics for Non-emergencies, 323
- Colardyn, Francis, see Schmidt, Christoph
- Colberg, John W., see Monk, Terri G.
- Connors, Dean, see Easley, R. Blaine
- Constant, Isabelle, Dubois, Marie-Claude, Piat, Véronique, Moutard, Marie-Laure, McCue, Maggie, Murat, Isabelle: Changes in Electroencephalogram and Autonomic Cardiovascular Activity during Induction of Anesthesia with Sevoflurane Compared with Halothane in Children, 1604
- Conzen, Peter F., see Heindl, Bernhard
- Cook, David J., see Sungurtekin, Hülya
- Cooper, James, see Myles, Paul S.
- Cooper, Robert C., Baumann, Patricia L., McDonald, William M.: An Unexpected Hyperkalemic Response to Succinylcholine during Electroconvulsive Therapy for Catatonic Schizophrenia, 574
- Cooper, Zachary A., Mihm, Frederick G.: Blood Pressure Control with Fenoldopam during Excision of a Pheochromocytoma, 558
- Copplestone, Christine, see Cohen, Marsha M.
- Cordato, Dennis J., Mather, Laurence E., Gross, Annette S., Herkes, Geoffrey K.: Pharmacokinetics of Thiopental Enantiomers during and following Prolonged High-dose Therapy, 1693
- Coté, Charles J., see Kaplan, Richard F.
- Cousins, Michael J.: Pain: The Past, Present, and Future of Anesthesiology? The E. A. Rovenstein Memorial Lecture, 538
- Cozian, Antoine, see Malinovsky, Jean-Marc
- Craig, William F., see Hamza, Mohamed A.
- Crawford, Mark W., see Swan, Hilton D.
- Crespo, Angel, see Sánchez-Guijo, Juan J.
- Crul, Ben J. P., Gerritse, Bastiaan M., Van Dongen, Robert T. M., Schoonderwaldt, Hennie C.: Epidural Fibrin Glue Injection Stops Persistent Postdural Puncture Headache, 576
- Cuenco, Joseph, Tzeng, Gary, Wittels, Bernard: Anesthetic Management of the Parturient with Systemic Lupus Erythematosus, Pulmonary Hypertension, and Pulmonary Edema, 568
- Cullen, Bruce F., see MacLennan, Neil
- Cullen, David J., see Gold, Carl G.; also see Liang, Bryan A.

## D

- Dahl, Jørgen B., Jeppesen, Inge S., Jørgensen, Henrik, Wetterslev, Jørn, Moiniche, Steen: Intraoperative and Postoperative Analgesic Efficacy and Adverse Effects of Intrathecal Opioids in Patients Undergoing Cesarean Section with Spinal Anesthesia: A Qualitative and Quantitative Systematic Review of Randomized Controlled Trials, 1919
- Dalmas, Serge, see Marsch, Stephan C. U.
- D'Amico, Frank, see Troianos, Christopher A.
- D'Angelo, Robert, see Nelson, Kenneth E.
- Dan, Kenjiro, see Nitahara, Keiichi
- d'Athis, François, see Capdevila, Xavier
- Datta, Sanjay, see Segal, Scott; also see Tsen, Lawrence C.
- Daven, Véronique B., see Bissonnette, Bruno
- Davidson, Bruce A., Knight, Paul R., Helinski, Jadwiga D., Nader, Nader D., Shanley, Thomas P., Johnson, Kent J.: The Role of Tumor Necrosis Factor- $\alpha$  in the Pathogenesis of Aspiration Pneumonitis in Rats, 486
- Davidson, Bruce A., see Nader, Nader D.
- Davies, Laurie K., see Sulek, Cheri A.
- Davies, M. Frances, see Zhang, Chousheng
- Dean, Laura S.: *Atlas of Anesthesia Volume V: Subspecialty Care*. Series Editor: Ronald D. Miller. Volume Editor: Stanley Muravchick, 903
- Deem, Steven, McKinney, Steven, Polissar, Nayak L., Hedges, Richard G., Swenson, Erik R.: Hemodilution during Venous Gas Embolization Improves Gas Exchange, without Altering  $\dot{V}_A$ - $\dot{Q}$  or Pulmonary Blood Flow Distributions, 1861
- de Hert, Stefan G., Gillebert, Thierry C., ten Broecke, Pieter W., Mouljijn, Adriaan C.: Length-dependent Regulation of Left Ventricular Function in Coronary Surgery Patients, 379
- de Kock, M., see Gautier, Ph. E.
- de la Coussaye, Jean E., see Aya, Antoine G.
- Delaunay, Laurent, see Chelly, Jacques E.
- Denman, William, see Kaplan, Richard F.
- Denny, Lynnette, see Wilder-Smith, Clive H.
- DePerio, Marietta, see Shore-Lesserson, Linda
- Deryck, Yvon L. J. M., see Schmidt, Christoph
- Desai, Manish, see Troianos, Christopher A.
- Desmonts, Jean-Marie, see Gueret, Gildas; also see Keita, Hawa
- DeSouza, Gerard J., see Jacobs, Jeffrey S.
- Despotis, George J., Gravlee, Glenn, Filos, Kriton, Levy, Jerrold: Anticoagulation Monitoring during Cardiac Surgery: A Review of Current and Emerging Techniques, 1122
- Despotis, George J., see Skubas, Nikolaos J.
- Devonshire, Debra, see Myles, Paul S.
- Dexter, Franklin: In Reply, 590
- Dexter, Franklin, Macario, Alex, Lubarsky, David A., Burns, David D.: Statistical Method to Evaluate Management Strategies to Decrease Variability in Operating Room Utilization: Application of Linear Statistical Modeling and Monte Carlo Simulation to Operating Room Management, 262
- Dexter, Franklin, Macario, Alex, Qian, Fang, Traub, Rodney D.: Forecasting Surgical Groups' Total Hours of Elective Cases for Allocation of Block Time: Application of Time Series Analysis to Operating Room Management, 1501
- Dexter, Franklin, Macario, Alex, Traub, Rodney D.: Which Algorithm for Scheduling Add-on Elective Cases Maximizes Operating Room Utilization? Use of Bin Packing Algorithms and Fuzzy Constraints in Operating Room Management, 1491
- Diaz, James H., Gould, Harry J., III: Management of Post-thoracotomy Pseudoangina and Myofascial Pain with Botulinum Toxin, 877
- Doble, Melissa, see Segal, Scott
- Dohi, Shuji, see Iida, Hiroki; also see Masue, Tatsuhiro; also see Tan, Zhiming
- Dominguez, Eric: Carbon Dioxide Monitoring during Deep Conscious Sedation Using Nasopharyngeal Airways, 1177
- Dominguez, Eric, Garbaccio, Michael C.: Reverse Arterial Blood Flow Mediated Local Anesthetic Central Nervous System Toxicity during Axillary Brachial Plexus Block, 901
- Domino, Karen B., Posner, Karen L., Caplan, Robert A., Cheney, Frederick W.: Airway Injury during Anesthesia: A Closed Claims Analysis, 1703
- Donati, François, Plaud, Benoît: Rocuronium-Cisatracurium Combinations, 587
- Donati, François, see Purdy, Robert
- Dougherty, Patrick M., Staats, Peter S.: Intra-thecal Drug Therapy for Chronic Pain: From Basic Science to Clinical Practice, 1891
- Downey, Glen, see Myles, Paul S.
- Downs, John B., see Thrush, David N.
- Doyle, D. John: Digital Display of Endotracheal Tube Cuff Pressures Made Simple, 329
- Doyle, Thomas J., see Langevin, Paul B.
- Drexler, Cathy, see Staunton, Michael
- Dubey, Prakash K., see Sinha, Prabhat K.
- Dubner, Ronald, see Byas-Smith, Michael G.
- Dubois, Marie-Claude, see Constant, Isabelle
- Duch, Daniel S., see Rehberg, Benno
- Du, Hong-Lin, see Kitamura, Takayuki
- Dulitz, Michael G., see Staunton, Michael
- Dumoulin, Jean-Louis, see Gueret, Gildas

## AUTHOR INDEX TO VOLUME 91

Dupont, Hervé, *see* Keita, Hawa  
 Dutton, Robert C., Smith, Warren D., Rampil, Ira J., Chortkoff, Ben S., Eger, Edmond L., II: Forty-hertz Midlatency Auditory Evoked Potential Activity Predicts Wakeful Response during Desflurane and Propofol Anesthesia in Volunteers, 1209  
 Duvaldestin, Philippe, Slavov, Velislav, Rebufat, Yves: Pharmacokinetics and Pharmacodynamics of Rapacuronium in Patients with Cirrhosis, 1305  
 Dwyer, Mary Jo, *see* Gold, Carl G.  
 Dyck, John B., *see* Angst, Martin S.  
 Dziarski, Jörg, *see* Lockwood, Geoffrey G.

## E

Easley, R. Blaine, George, Reggie, Connors, Dean, Tobias, Joseph D.: Aseptic Meningitis after Spinal Anesthesia in an Infant, 305  
 Eaton, Michael, *see* Wagner, Larry E., II  
 Ebert, Thomas J.: In Reply, 887  
 Eccher, Giuditta, *see* Pelosi, Paolo  
 Eckenhooff, Roderic G., Johansson, Jonas S.: On the Relevance of "Clinically Relevant Concentrations" of Inhaled Anesthetics in *In Vitro* Experiments, 856  
 Eckstein, Hans-Henning, *see* Weigand, Markus A.  
 Edbril, Steven D., Lagasse, Robert S.: Relationship between Malpractice Litigation and Human Errors, 848  
 Egan, Talmage D., Kuramkote, Suma, Gong, Guoqing, Zhang, Jie, McJames, Scott W., Bailey, Peter L.: Fentanyl Pharmacokinetics in Hemorrhagic Shock: A Porcine Model, 156  
 Eger, Edmond L., II, *see* Dutton, Robert C.  
 Eichinger, Hans M., *see* Froeba, Gebhard  
 Eisenach, James C.: Combined Spinal-Epidural Analgesia in Obstetrics, 299  
 Eisenach, James C.: Obstetric Anesthesia: What Have You Done for Us Lately?, 907  
 Eisenach, James C., Lavand'homme, Patricia, Tong, Chuanyao, Cheng, Jen-Kun, Pan, Hui-Lin, Virtanen, Raimo, Nikkanen, Hanna, James, Robert: Antinociceptive and Hemodynamic Effects of a Novel  $\alpha_2$ -Adrenergic Agonist, MPV-2426, in Sheep, 1425  
 Eisenach, James C., *see* Chiari, Astrid; *also see* Gomes, Josenilia A.; *also see* Lavand'homme, Patricia M.; *also see* Nelson, Kenneth E.  
 Eisenhuber, Edith, *see* Akça, Ozan  
 Ekbohm, Dale C., *see* Staunton, Michael  
 Elam, Mikael, *see* Magnúsdóttir, Helga  
 Eledjam, Jean-Jacques, *see* Aya, Antoine G.; *also see* Aya, Antoine G. M.  
 El-Khatib, Mohamad F., *see* Baraka, Anis S.  
 Enders-Klein, Cheri, *see* Henthorn, Thomas K.  
 England, Michael R.: The Changes in Bispectral Index during a Hypovolemic Cardiac Arrest, 1947

Enneking, F. Kayser, *see* Sulek, Cheri A.  
 Ensinger, Hermann, Rantala, Arto, Vogt, Josef, Georgieff, Michael, Takala, Jukka: Effect of Dobutamine on Splanchnic Carbohydrate Metabolism and Amino Acid Balance after Cardiac Surgery, 1587  
 European Perflubron Emulsion Study Group, *see* Spahn, Donat R.

## F

Fabbro-Péray, Pascale, *see* Aya, Antoine G.  
 Fanard, L., *see* Gautier, Ph. E.  
 Farag, Adel M., *see* Khalil, Samia  
 Farber, Neil E., *see* Staunton, Michael  
 Farhangkhoei, Parviz, *see* Mathur, Sanjiv  
 Faryniak, Barbara, *see* Ullrich, Roman  
 Fee, J. P. Howard, *see* Murray, James M.  
 Fernández-Liesa, Ignacio, *see* Panadero, Alfredo  
 Fernando, Roshan, *see* Pickering, Anthony E.  
 Fiedler, Fritz, *see* Heller, Axel  
 Filos, Kriton, *see* Despotis, George J.  
 Finkelstein, Richard G.: The Intraoperative Diagnosis of a Tracheoesophageal Fistula in an Adult, 1946  
 Fink, Heidrun, *see* Blobner, Manfred  
 Fink, Rainer H. A., *see* Kunst, Gudrun  
 Finzel, Kathleen C., *see* Manecke, Gerard R., Jr.  
 Fischer, Lars G., Horstman, Damian J., Hahnenkamp, K., Kechner, Nancy E., Rich, George F.: Selective iNOS Inhibition Attenuates Acetylcholine- and Bradykinin-induced Vasoconstriction in Lipopolysaccharide-exposed Rat Lungs, 1724  
 Fisher, Cherie, *see* Shore-Lesserson, Linda  
 Fisher, Dennis M., Wright, Peter M. C.: In Reply, 1555  
 Fisher, Dennis M., *see* Reynolds, Lynne M.; *also see* Romson, Joseph L.  
 Fitzgibbon, Dermot R., Ready, L. Brian, Ching, Joan M.: Intramuscular Opioid Injections: A Step in the Wrong Direction, 891  
 Fitzgibbon, Dermot R., *see* Pavlin, D. Janet  
 Flachsbarth, Keith, *see* Romson, Joseph L.  
 Fleming, Neal W., Chung, Frances, Glass, Peter S. A., Kitts, John B., Kirkegaard-Nielsen, Hans, Gronert, Gerald A., Chan, Vincent, Gan, Tong, J., Cicutti, Nicholas, Caldwell, James E.: Comparison of the Intubation Conditions Provided by Rapacuronium (ORG 9487) or Succinylcholine in Humans during Anesthesia with Fentanyl and Propofol, 1311  
 Fletcher, Helen E., *see* Myles, Paul S.  
 Floyd, Herbert M.: *Tracheal Intubation: Theory and Practice*. By John W. R. McIntyre and Akimoto Matsuki, 1562  
 Foëx, Pierre, *see* Marsch, Stephan C. U.  
 Fogarty, Thomas J., *see* Novak, Richard J.  
 Foldes, Francis F., *see* Miguel, Rafael

Foss, Michael L., *see* Nelson, Kenneth E.  
 Fragen, Robert, *see* Miguel, Rafael  
 Frago, Miguel C., *see* Cairns, Brian E.  
 Frame, Mary D. S., *see* Mustafa, S. Shahzad  
 Freund, Peter R., *see* Posner, Karen L.  
 Friederich, Patrick, Urban, Bernd W.: Interaction of Intravenous Anesthetics with Human Neuronal Potassium Currents in Relation to Clinical Concentrations, 1853  
 Frietsch, Thomas, *see* Lenz, Christian  
 Fröba, Gebhardt, *see* Calzia, Enrico  
 Froeba, Gebhard, Marx, Thomas, Pazhur, Johannes, Baur, Christoph, Baeder, Stefan, Calzia, Enrico, Eichinger, Hans M., Radermacher, Peter, Georgieff, Michael: Xenon Does Not Trigger Malignant Hyperthermia in Susceptible Swine, 1047  
 Frolich, Michael A.: In Reply, 586  
 Fujita, Satoshi, *see* Novalija, Enis  
 Fujiwara, Syunsuke, *see* Tsujimoto, Saburo  
 Fukuda, Kazuhiko, *see* Kakuyama, Mashiro  
 Furuya, Hitoshi, *see* Nishimura, Kenji  
 Fütterer, Carsten, *see* Lenz, Christian

## G

Gajraj, Noor M., *see* Hamza, Mohamed A.  
 Gall, Richard, Blakley, Brian, Warrington, Richard, Bell, Dean D.: Intraoperative Anaphylactic Shock from Bacitracin Nasal Packing after Septorhinoplasty, 1545  
 Gan, Tong, J., *see* Fleming, Neal W.  
 Garbaccio, Michael C., *see* Dominguez, Eric  
 Garstka, Gudrun, *see* Bouillon, Thomas  
 Gattinoni, Luciano, *see* Pelosi, Paolo  
 Gaur, Atul, *see* Sinha, Prabhat K.  
 Gautier, Ph. E., de Kock, M., Van Steenberghe, A., Poth, N., Lahaye-Goffart, B., Fanard, L., Hody, J. L.: Intrathecal Ropivacaine for Ambulatory Surgery: A Comparison between Intrathecal Bupivacaine and Intrathecal Ropivacaine for Knee Arthroscopy, 1239  
 Gearen, Peter A., *see* Sulek, Cheri A.  
 Geiger, Klaus, *see* Benzing, Albert  
 Geisslinger, Gerd, *see* Muth-Selbach, Uta S.  
 George, Reggie, *see* Easley, R. Blaine  
 Georgieff, Michael, *see* Calzia, Enrico; *also see* Ensinger, Hermann; *also see* Froeba, Gebhard  
 Germann, Peter, *see* Chiari, Astrid; *also see* Ullrich, Roman  
 Gerritse, Bastiaan M., *see* Crul, Ben J. P.  
 Ghoname, El-sayed A., *see* Hamza, Mohamed A.  
 Giffard, Rona G., *see* Xu, Lijun  
 Gillebert, Thierry C., *see* de Hert, Stefan G.  
 Gingrich, Kevin J., *see* Wagner, Larry E., II  
 Ginsberg, B., *see* Kaplan, Richard F.  
 Ginsburg, Ilana, *see* Amar, David  
 Giurati, Gabriella, *see* Pelosi, Paolo  
 Glass, Peter S. A., *see* Fleming, Neal W.  
 Gleason, David H., *see* Klein, Stephen M.  
 Glen, J. B. (Jain), Schwilden, Helmut, Stan-

- ski, Donald R.: *What Are the Next Steps?*, 601
- Gold, Carl G., Cullen, David J., Gonzales, Scott, Houtmeyers, Deirdre, Dwyer, Mary Jo: Rapid Opioid Detoxification during General Anesthesia: A Review of 20 Patients, 1639
- Goldman, Lee, *see* Oliver, Michael F.
- Gomes, Josenilia A., Li, Xinhui, Pan, Hui-Lin, Eisenach, James C.: Intrathecal Adenosine Interacts with a Spinal Noradrenergic System to Produce Antinociception in Nerve-injured Rats, 1072
- Gong, Guoqing, *see* Egan, Talmage D.
- Gonzales, Scott, *see* Gold, Carl G.
- Goodnough, Lawrence T., *see* Monk, Terri G.
- Goto, Fumio, *see* Tsukagoshi, Hiroshi
- Goto, Takahisa, Matsukawa, Takashi, Sessler, Daniel L., Uezono, Shoichi, Ishiguro, Yoshiaki, Ozaki, Makoto, Morita, Shigehito: Thermoregulatory Thresholds for Vasoconstriction in Patients Anesthetized with Various 1-Minimum Alveolar Concentration Combinations of Xenon, Nitrous Oxide, and Isoflurane, 626
- Goto, Takahisa, *see* Nakata, Yoshinori
- Goudsouzian, N., *see* Kaplan, Richard F.
- Gould, Harry J., III, *see* Diaz, James H.
- Grabenwoeger, Florian, *see* Akça, Ozan
- Gracely, Richard H., *see* Byas-Smith, Michael G.
- Graf, Bernhard M., *see* Kunst, Gudrun
- Granry, Jean Claude, *see* Minassian, Aram Ter
- Gras, Troy W., *see* Hodgson, Peter S.
- Gravenstein, Dietrich, Melker, Richard J., Lampotang, Samsun: Clinical Assessment of a Plastic Optical Fiber Stylet for Human Tracheal Intubation, 648
- Gravenstein, Nikolaus, *see* Langevin, Paul B.
- Gravlee, Glenn, *see* Despotis, George J.
- Greengrass, Roy A., *see* Klein, Stephen M.
- Greif, Robert, Laciny, Sonja, Rapf, Brigitta, Hickie, Randy S., Sessler, Daniel L.: Supplemental Oxygen Reduces the Incidence of Postoperative Nausea and Vomiting, 1246
- Greim, Clemens-A., *see* Apfel, Christian C.
- Grief, Robert, *see* Lenhardt, Rainer
- Griffith, Renny, *see* Kaplan, Richard F.
- Groeben, Harald, Peters, Jürgen: In Reply, 319
- Gronert, Gerald A.: Succinylcholine Hyperkalemia after Burns, 320
- Gronert, Gerald A., *see* Fleming, Neal W.
- Gross, Annette S., *see* Cordato, Dennis J.
- Gross, Jeffrey B., *see* Kamble, Vaibhav A.
- Grover, Frederick L., *see* London, Martin J.
- Gueret, Gildas, Guisard, Frédérique, Dumoulin, Jean-Louis, Oury, Jean-François, Mantz, Jean, Desmonts, Jean-Marie: Life-threatening Bilateral Pneumothorax Caused by Misconnection of the Laser Lens Cooling System during Gynecologic Laparoscopy, 1179
- Guisard, Frédérique, *see* Gueret, Gildas
- Gulig, Paul A., *see* Langevin, Paul B.
- Gunn, Holly C., *see* Pavlin, D. Janet
- Guo, Tian-Zhi, *see* Zhang, Chousheng
- Gupta, Sunil, *see* Tsui, Ban C. H.
- Gyermek, Laszlo, *see* Nishiyama, Tomoki

## H

- Habibzadeh, Farrokh, Yadollahie, Mahboobeh: Mathematical Equivalent of Metabolic Alkalosis Part of the Goldberg Acid-Base Map, 1967
- Hagen, Joan F., *see* Smith, Charles E.
- Hahnenkamp, K., *see* Fischer, Lars G.
- Haitma, Jack J., *see* Verbrugge, Serge J. C.
- Hall, Dennis B.: A Thyroid Shield Can Correct a Laryngeal Mask Airway Air Leak, 1558
- Hammer, Gregory B., Krane, Elliot J.: Venous Access for Pediatric Liver Transplantation, 322
- Hamza, Mohamed A., Ghoname, El-sayed A., White, Paul F., Craig, William F., Ahmed, Hesham E., Gajraj, Noor M., Vakharia, Akshay S., Noe, Carl E.: Effect of the Duration of Electrical Stimulation on the Analgesic Response in Patients with Low Back Pain, 1622
- Hamza, Mohamed A., White, Paul F., Ahmed, Hesham E., Ghoname, El-sayed A.: Effect of the Frequency of Transcutaneous Electrical Nerve Stimulation on the Postoperative Opioid Analgesic Requirement and Recovery Profile, 1232
- Hanaoka, Kazuo, *see* Kitamura, Takayuki
- Handschuh, Thomas, *see* Calzia, Enrico
- Hannallah, Raafat, *see* Kaplan, Richard F.
- Harayama, Nobuya, *see* Inoue, Yoshitaka
- Harris, R. Adron, *see* Cardoso, Rita A.
- Hartmann, Thomas, *see* Belani, Kumar
- Hashiba, Eiji, *see* Kotani, Naoki
- Hashimoto, Hiroshi, *see* Kotani, Naoki
- Hatano, Yoshio, *see* Hirakata, Hideo
- Hauerberg, John, *see* Wang, Lars P.
- Haythornthwaite, Jennifer A., *see* Raja, Srinivasa N.
- Heath, Karen J., *see* Matta, Basil F.
- Hedges, Richard G., *see* Deem, Steven
- Heimbach, David M., *see* MacLennan, Neil
- Heimbach, Dirk, *see* Bouillon, Thomas
- Heindl, Bernhard, Reichle, Florian M., Zahler, Stefan, Conzen, Peter F., Becker, Bernhard F.: Sevoflurane and Isoflurane Protect the Reperfused Guinea Pig Heart by Reducing Posts ischemic Adhesion of Polymorphonuclear Neutrophils, 521
- Heinzerling, Hartmut, *see* Spahn, Donat R.
- Held, Heinz-Dieter, *see* Verbrugge, Serge J. C.
- Helinski, Jadwiga D., *see* Davidson, Bruce A.
- Heller, Axel, Fiedler, Fritz, Schmeck, Joachim, Lück, Vanessa, Iovanna, Juan L., Koch, Thea: Pancreatitis-associated Pro-

- tein Protects the Lung from Leukocyte-induced Injury, 1408
- Hempelmann, Gunter, *see* Nau, Carla
- Henderson, Kristine: In Reply, 323
- Henthorn, Thomas K., Krejcie, Tom C., Niemann, Claus U., Enders-Klein, Cheri, Shanks, Colin A., Avram, Michael J.: Ketamine Distribution Described by a Recirculatory Pharmacokinetic Model Is Not Stereoselective, 1733
- Henzel-Rouellé, Danielle, *see* Keita, Hawa
- Herkes, Geoffrey K., *see* Cordato, Dennis J.
- Hettrick, Douglas A., *see* Toller, Wolfgang G.
- Hetz, Hubert, *see* Akça, Ozan
- He, Yan-Ling, *see* Ueyama, Hiroshi
- Hickey, Robert F., *see* Ismaeil, Mohamed S.
- Hickle, Randy S., *see* Greif, Robert
- Hill, Bradley B., *see* Novak, Richard J.
- Hill, Lauren, *see* Wilder-Smith, Clive H.
- Hirakata, Hideo, Nakamura, Kumi, Yokubol, Bencharatana, Toda, Hiroshi, Hatano, Yoshio, Urabe, Nobukata, Mori, Kenjiro: Propofol Has Both Enhancing and Suppressing Effects on Human Platelet Aggregation *In Vitro*, 1361
- Hodgson, Peter S., Liu, Spencer S., Gras, Troy W.: Does Epidural Anesthesia Have General Anesthetic Effects? A Prospective, Randomized, Double-blind, Placebo-controlled Trial, 1687
- Hody, J. L., *see* Gautier, Ph. E.
- Hoefl, Andreas, *see* Bouillon, Thomas; *also see* Rehberg, Benno
- Hoffmann, Tomas, *see* Von Dobschuetz, Ernst
- Hofstadter, Maura B., *see* Kain, Zeev N.
- Höhn, Laurent, Schweizer, Alexandre, Morel, Denis R., Spiliopoulos, Anastase, Licker, Marc: Circulatory Failure after Anesthesia Induction in a Patient with Severe Primary Pulmonary Hypertension, 1943
- Hollenberg, James, *see* Williams-Russo, Pamela
- Holme, Ingar, *see* Oliver, Michael F.
- Holzmann, Alexandra, Manktelow, Claire, Taut, Friedemann J. H., Bloch, Kenneth D., Zapol, Warren M.: Inhibition of Nitric Oxide Synthase Prevents Hyporesponsiveness to Inhaled Nitric Oxide in Lungs from Endotoxin-challenged Rats, 215
- Hood, David D., *see* Chiari, Astrid; *also see* Nelson, Kenneth E.
- Hopp, Francis A., *see* Stuth, Eckehard A. E.
- Horlocker, Terese T., *see* Keegan, Mark T.
- Horn, Ernst-Peter, Schroeder, Frank, Wilhelm, Stefan, Sessler, Daniel L., Standl, Thomas, Von dem Busche, Katja, am Esch, Jochen Schulte: Postoperative Pain Facilitates Nonthermoregulatory Tremor, 979
- Horstman, Damian J., *see* Fischer, Lars G.
- Houtmeyers, Deirdre, *see* Gold, Carl G.
- Hsu, James, *see* Reynolds, Lynne M.
- Hübner, Matthias, *see* Bleyl, Jörg U.
- Hummer, Kelly, *see* Kaplan, Richard F.

## AUTHOR INDEX TO VOLUME 91

Hunt, Jennifer O., *see* Myles, Paul S.  
 Hurford, William E., *see* Bigatello, Luca M.;  
*also see* Stuedel, Wolfgang  
 Hynson, James, *see* Belani, Kumar

## I

Iaizzo, Paul A., *see* Musley, Shailesh Kumar V.  
 Ide, Tohru, *see* Nishino, Takashi  
 Iida, Hiroki, Ohata, Hiroto, Iida, Mami, Watanabe, Yukinaga, Dohi, Shuji: Direct Effects of  $\alpha_1$ - and  $\alpha_2$ -Adrenergic Agonists on Spinal and Cerebral Pial Vessels in Dogs, 479  
 Iida, Mami, *see* Iida, Hiroki  
 Iijichi, Kazuko, *see* Uratsui, Yuko  
 Ikonomidis, John S., *see* Brodsky, Jay B.  
 Imaizumi, Hitoshi, *see* Omote, Keiichi  
 Infosino, Andrew, *see* Reynolds, Lynne M.  
 Inoue, Yoshitaka, Shibuya, Izumi, Kabashima, Narutoshi, Noguchi, Jun, Harayama, Nobuya, Ueta, Yoichi, Sata, Takeyoshi, Shigematsu, Akio, Yamashita, Hiroshi: The Mechanism of Inhibitory Actions of Propofol on Rat Supraoptic Neurons, 167  
 Iovanna, Juan L., *see* Heller, Axel  
 Irie, Jun, *see* Uratsui, Yuko  
 Irita, Kazuo, *see* Kansa, Masumi  
 Iseki, Ken, Murakawa, Masahiro: In Reply, 1557  
 Iseki, Masako, Mitsuhashi, Hiromasa, Tanabe, Yutaka, Miyazaki, Toyo: Idiopathic Trigeminal Neuralgia Associated with a Severe Atypical Facial Pain Exacerbated by Hydrocephalus, 1968  
 Ishiguro, Yoshiaki, *see* Goto, Takahisa; *also see* Nakata, Yoshinori  
 Ismaeil, Mohamed S., Tkachenko, Igor, Hickey, Robert F., Cason, Brian A.: Colchicine Inhibits Isoflurane-induced Preconditioning, 1816  
 Isono, Shiroh, *see* Nishino, Takashi  
 Itoh, Takeo, *see* Yamashita, Akiko  
 Izdes, Seval, *see* Ozturk, Ertan

## J

Jääskeläinen, Satu K., *see* Kaisti, Kaike K.  
 Jacobs, Ellis, *see* Zaugg, Michael  
 Jacobs, Jeffrey S., Lewis, Michael C., Desouza, Gerard J., TerRiet, Menno F.: Crimping of a Laser Tube Resulting in Hypoxemia, 898  
 James, Francis M.: Oral Practice Examinations: Are They Worth It?, 4  
 James, Robert, *see* Eisenach, James C.  
 Janelle, Gregory M., *see* Lobato, Emilio B.  
 Jansson, Erica, *see* Sharma, Rajiv R.  
 Jansson, Sten-Erik, *see* Pesonen, Eero J.  
 Jäntti, Ville, *see* Yli-Hankala, Arvi  
 Jeppesen, Inge S., *see* Dahl, Jørgen B.  
 Jia, Zhengping, *see* Joo, Daisy T.

Johansson, Göran, *see* Sharma, Rajiv R.  
 Johansson, Jonas S., *see* Eckenhoff, Roderic G.  
 Johnson, Joel O., Bradway, James A., Blood, Todd: A Hairy Situation, 595  
 Johnson, Kent J., *see* Davidson, Bruce A.; *also see* Nader, Nader D.  
 Johnson, Lynt B., *see* Schroeder, Rebecca A.  
 Johnstone, Robert E.: Laryngospasm Treatment—An Explanation, 581  
 Jones, David S., *see* Murray, James M.  
 Joo, Daisy T., Xiong, Zhigang, MacDonald, John F., Jia, Zhengping, Roder, John, Sonner, Jim, Orser, Beverley A.: Blockade of Glutamate Receptors and Barbiturate Anesthesia: Increased Sensitivity to Pentobarbital-induced Anesthesia Despite Reduced Inhibition of AMPA Receptors in *GluR2* Null Mutant Mice, 1329  
 Jørgensen, Henrik, *see* Dahl, Jørgen B.  
 Jougla, Eric, *see* Clergue, François  
 Jubert, Carole, *see* Kharasch, Evan D.  
 Julian, Desmond G., *see* Oliver, Michael F.

## K

Kabashima, Narutoshi, *see* Inoue, Yoshitaka  
 Kadono, Noriko, *see* Uda, Rumiko  
 Kainz, Christian, *see* Chiari, Astrid  
 Kain, Zeev N., Hofstadter, Maura B., Mayes, Linda C.: In Reply, 1959  
 Kaisti, Kaike K., Jääskeläinen, Satu K., Rinne, Juha O., Metsähonkala, Liisa, Scheinin, Harry: Epileptiform Discharges during 2 MAC Sevoflurane Anesthesia in Two Healthy Volunteers, 1952  
 Kajikuri, Junko, *see* Yamashita, Akiko  
 Kakuyama, Masahiro, Toda, Hiroshi, Osawa, Masami, Fukuda, Kazuhiko: An Adverse Effect of Carboxymethylcellulose in Lidocaine Jelly, 1969  
 Kamble, Vaibhav A., Lilly, Richard B., Gross, Jeffrey B.: Unanticipated Difficult Intubation as a Result of an Asymptomatic Valvular Cyst, 872  
 Kampine, John P., *see* Novalija, Enis; *also see* Stekiel, Thomas A.  
 Kampine, John P., *see* Stuth, Eckehard A. E.  
 Kanmura, Yuichi: In Reply, 1961  
 Kanmura, Yuichi, *see* Yamashita, Akiko  
 Kansa, Masumi, Nagata, Taro, Irita, Kazuo, Takahashi, Shosuke: Dibucaine and Tetracaine Inhibit the Activation of Mitogen-activated Protein Kinase Mediated by L-type Calcium Channels in PC12 Cells, 1798  
 Kanzow, Maria, *see* Bleyl, Jörg U.  
 Kaplan, Richard F., Uejima, T., Lobel, G., Goudsouzian, N., Ginsberg, B., Hannallah, Raafat, Coté, Charles J., Denman, William, Griffith, Renny, Clarke, Chris, Hummer, Kelly: Intramuscular Rocuronium in Infants and Children: A Multicenter Study To Evaluate Tracheal Intubating Conditions, Onset, and Duration of Action, 633

Kariger, Robert, *see* Tang, Jun  
 Karmazyn, Morris, *see* Mathur, Sanjay  
 Karski, Jacek, *see* Wong, David T.  
 Katori, Kiyoshi, *see* Nitahara, Keiichi  
 Kawaguchi, Masahiko, *see* Nishimura, Kenji  
 Kawamata, Tomoyuki, Omote, Keiichi: Activation of Spinal *N*-methyl-D-aspartate Receptors Stimulates a Nitric Oxide/Cyclic Guanosine 3',5'-monophosphate/Glutamate Release Cascade in Nociceptive Signaling, 1415  
 Kawamata, Tomoyuki, *see* Omote, Keiichi  
 Kawana, Shin, *see* Yamamoto, Shuji  
 Kawasaki-Yatsugi, Sachiko, *see* Nishiyama, Tomoki  
 Kawkabani, Nadine I., *see* Baraka, Anis S.  
 Kaya, Kadir, *see* Ozturk, Ertan  
 Kearney, Ramona, *see* Tsui, Ban C. H.  
 Kechner, Nancy E., *see* Fischer, Lars G.  
 Keegan, Mark T., Horlocker, Terese T.: Epidural Catheter Removal before Unanticipated Anticoagulation: The Pharmacy Failed, 328  
 Keegan, Mark T., Sharbrough, Frank W., Lanier, William L.: Shivering Complicating the Treatment of Neurologically Impaired Surgical and Intensive Care Unit Patients, 874  
 Keipert, Peter E., *see* Spahn, Donat R.  
 Keita, Hawa, Henzel-Rouellé, Danielle, Dupont, Hervé, Desmonts, Jean-Marie, Mantz, Jean: Halothane and Isoflurane Increase Spontaneous but Reduce the *N*-Methyl-D-Aspartate-Evoked Dopamine Release in Rat Striatal Slices: Evidence for Direct Presynaptic Effects, 1788  
 Keith, Fraser, *see* Romson, Joseph L.  
 Keller, ChristianPühringer, Fritz, *see* Brimacombe, Joseph  
 Kempen, Paul: Cost-efficient End-tidal Carbon Dioxide Monitoring *via* Hudson-style Mask, 1176  
 Kersten, Judy R., *see* Toller, Wolfgang G.  
 Khalil, Samia, Campos, Carlos, Farag, Adel M., Vije, Hadassah, Ritchey, Michael, Chuang, Alice: Caudal Block in Children: Ropivacaine Compared with Bupivacaine, 1279  
 Kharasch, Evan D.: Putting the Brakes on Anesthetic Breakdown, 1192  
 Kharasch, Evan D., Jubert, Carole: Compound A Uptake and Metabolism to Mercapturic Acids and 3,3,3-Trifluoro-2-fluoromethoxypropanoic Acid during Low-flow Sevoflurane Anesthesia: Biomarkers for Exposure, Risk Assessment, and Interspecies Comparison, 1267  
 Kirkegaard-Nielsen, Hans, Caldwell, James E., Berry, Peter D.: Rapid Tracheal Intubation with Rocuronium: A Probability Approach to Determining Dose, 131  
 Kirkegaard-Nielsen, Hans, *see* Fleming, Neal W.  
 Kirnő, Klaus, *see* Magnúsdóttir, Helga  
 Kitamura, Sanji, *see* Uratsui, Yuko  
 Kitamura, Takayuki, Yamada, Yoshitsugu,

- Du, Hong-Lin, Hanaoka, Kazuo: Efficiency of a New Fiberoptic Stylet Scope in Tracheal Intubation, 1628
- Kitts, John B., *see* Fleming, Neal W.
- Klatt, Jonathan L., *see* Reuben, Scott S.
- Klatt, Margaret L., *see* Reuben, Scott S.
- Klein, Andrew S., *see* Schroeder, Rebecca A.
- Klein, Harvey G.: Immunomodulatory Aspects of Transfusion: A Once and Future Risk?, 861
- Klein, Stephen M., Greengrass, Roy A., Gleason, David H., Nunley, James A., Steele, Susan M.: Major Ambulatory Surgery with Continuous Regional Anesthesia and a Disposable Infusion Pump, 563
- Klimscha, Walter, *see* Chiari, Astrid
- Knight, Paul R., *see* Davidson, Bruce A.; *also see* Nader, Nader D.
- Kochs, Eberhard, *see* Blobner, Manfred
- Koch, Thea, *see* Heller, Axel
- Koerschgen, Meagan E., *see* Pavlin, D. Janet
- Koivuranta, Merja, *see* Apfel, Christian C.
- Kokita, Naohiro, *see* Stekiel, Thomas A.
- Komanduri, Vijaya, *see* Musley, Shailesh Kumar V.
- Kopacz, Dan J., *see* Bernards, Christopher M.
- Kopman, Aaron F.: The Onset/Offset Profiles of Rapacuronium and Succinylcholine Are Not Identical, 1554
- Korpela, Reijo, Korvenoja, Pekka, Meretoja, Olli A.: Morphine-sparing Effect of Acetaminophen in Pediatric Day-case Surgery, 442
- Korttilä, Kari, *see* Yli-Hankala, Arvi
- Korvenoja, Pekka, *see* Korpela, Reijo
- Korz, Linda, *see* Buckley, Norm
- Kosunen, Hannu, *see* Tenhunen, Jyrki J.
- Kotani, Naoki, Hashimoto, Hiroshi, Sessler, Daniel I., Yatsu, Yuichi, Muraoka, Masatoshi, Matsuki, Akitomo: Exposure to Cigarette Smoke Impairs Alveolar Macrophage Functions during Halothane and Isoflurane Anesthesia in Rats, 1823
- Kotani, Naoki, Takahashi, Satoshi, Sessler, Daniel I., Hashiba, Eiji, Kubota, Takeshi, Hashimoto, Hiroshi, Matsuki, Akitomo: Volatile Anesthetics Augment Expression of Proinflammatory Cytokines in Rat Alveolar Macrophages during Mechanical Ventilation, 187
- Koumenis, Iphigenia L., *see* Xu, Lijun
- Krane, Elliot J., *see* Hammer, Gregory B.
- Krejcie, Tom C., *see* Henthorn, Thomas K.
- Krenn, Claus, *see* Chiari, Astrid
- Krol, Marina, *see* Zaugg, Michael
- Krolo, Mirko, *see* Stuth, Eckhard A. E.
- Kubota, Takeshi, *see* Kotani, Naoki
- Kuhlen, Ralf, *see* Max, Martin
- Kuipers, Jette A., Boer, Fred, Olieman, Wim, Burm, Anton G. L., Bovill, James G.: First-pass Lung Uptake and Pulmonary Clearance of Propofol: Assessment with a Recirculatory Indocyanine Green Pharmacokinetic Model, 1780
- Kunimoto, Fumio, *see* Tsukagoshi, Hiroshi
- Kunst, Gudrun, Graf, Bernhard M., Schreiner, Rupert, Martin, Eike, Fink, Rainer H. A.: Differential Effects of Sevoflurane, Isoflurane, and Halothane on  $Ca^{2+}$  Release from the Sarcoplasmic Reticulum of Skeletal Muscle, 179
- Kuo, Paul C., *see* Schroeder, Rebecca A.
- Kuramkote, Suma, *see* Egan, Talmage D.
- Kurz, Andrea, *see* Akça, Ozan
- Kuschinsky, Wolfgang, *see* Lenz, Christian
- Kustra, Rafal, *see* Wong, David T.

## L

- Läärä, Esa, *see* Apfel, Christian C.
- Lachmann, Burkhard, *see* Verbrugge, Serge J. C.
- Laciny, Sonja, *see* Greif, Robert; *also see* Lenhardt, Rainer
- Lackner, Franz X., *see* Akça, Ozan
- Lagasse, Robert S., *see* Edbril, Steven D.
- Lahaye-Goffart, B., *see* Gautier, Ph. E.
- Lampl, Karl, *see* Akça, Ozan
- Lampotang, Samsun, *see* Gravenstein, Dietrich
- Landow, Laurence: In Reply, 1557
- Langenstein, Holger, *see* Andres, Alexander H.
- Langevin, Paul B., Gravenstein, Nikolaus, Doyle, Thomas J., Roberts, Steven A., Skinner, Stacy, Langevin, Sharon O., Gulig, Paul A.: Growth of *Staphylococcus aureus* in Diprivan and Intralipid: Implications on the Pathogenesis of Infections, 1394
- Langevin, Sharon O., *see* Langevin, Paul B.
- Langevin, Stephan, Lessard, Martin R., Trépanier, Claude A., Baribault, Jean-Pierre: Alfentanil Causes Less Postoperative Nausea and Vomiting than Equipotent Doses of Fentanyl or Sufentanil Outpatients, 1666
- Lanier, William L., *see* Keegan, Mark T.
- Lapandry, Claude, *see* Adnet, Frédéric
- Lapostolle, Frédéric, *see* Adnet, Frédéric
- Larson, C. Philip, Jr.: In Reply, 582
- Lavand'homme, Patricia, *see* Eisenach, James C.
- Lavand'homme, Patricia M., Eisenach, James C.: Sex Differences in Cholinergic Analgesia II: Differing Mechanisms in Two Models of Allodynia, 1455
- Laxenaire, Marie Claire, *see* Bouaziz, Hervé; *also see* Clergue, François
- Le Corre, Pascal, *see* Malinovsky, Jean-Marc
- Lee, Chingmuh, *see* Nishiyama, Tomoki
- Lee, Choong-Sik, *see* Chiari, Astrid
- Lefer, Allan M., *see* Armstead, Valerie E.
- Lefrant, Jean-Yves, *see* Aya, Antoine G.
- Leger, Roland, Palm, Sebastian, Wulf, Hinnerk, Vosberg, Axel, Neppert, Jürgen: Transfusion-related Lung Injury with Leukopenic Reaction Caused by Fresh Frozen Plasma Containing Anti-NB1, 1529
- Lenhardt, Rainer, Grief, Robert, Sessler, Daniel I., Laciny, Sonja, Rajek, Angela, Bastanmehr, Hiva: Relative Contribution of Skin and Core Temperatures to Vasoconstriction and Shivering Thresholds during Isoflurane Anesthesia, 422
- Lenz, Christian, Frietsch, Thomas, Fütterer, Carsten, Rebel, Annette, Van Ackern, Klaus, Kuschinsky, Wolfgang, Waschke, Klaus F.: Local Coupling of Cerebral Blood Flow to Cerebral Glucose Metabolism during Inhalational Anesthesia in Rats: Desflurane versus Isoflurane, 1720
- Lenz, Christian, Waschke, Klaus F., Kuschinsky, Wolfgang: In Reply, 890
- Lepage, Jean-Yves, *see* Malinovsky, Jean-Marc
- Lerman, Jerrold, *see* Swan, Hilton D.
- Lessard, Martin R., *see* Langevin, Stephan
- Leung, Jacqueline M., *see* Romson, Joseph L.
- Levi, David C., *see* Brodsky, Jay B.
- Levinson, Yuri, *see* Ben-Eliyahu, Shamgar
- Levy, Jerrold, *see* Despotis, George J.
- Lewis, Michael C., *see* Jacobs, Jeffrey S.
- Li, Allen H., *see* Liu, Hung-Pin
- Liang, Bryan A., Cullen, David J.: The Legal System and Patient Safety: Charting a Divergent Course: The Relationship between Malpractice Litigation and Human Errors, 609
- Lichter, J. Lance, *see* Purdy, Robert
- Licker, Marc, *see* Höhn, Laurent
- Lien, Cynthia A., Belmont, Matthew R., Roth, Doreen L., Wray, Okamoto, Michiko, Abalos, Amy, Savarese, John J.: Pharmacodynamics and the Plasma Concentration of Mivacurium during Spontaneous Recovery and Neostigmine-facilitated Recovery, 119
- Lienhart, André, *see* Clergue, François
- Liguori, Gregory A., *see* Williams-Russo, Pamela
- Lilly, Richard B., *see* Kamble, Vaibhav A.
- Lin, Chih-Chung, Shyr, Ming-Hwang, Tan, Peter P. C., Chien, Chin-Sung, Pan, Shiow-Lin, Wang, Chuan-Chwan, Chiu, Chi-Tso, Yang, Chuen-Mao: Mechanisms Underlying the Inhibitory Effect of Propofol on the Contraction of Canine Airway Smooth Muscle, 750
- Lindgren, Leena, *see* Pere, Pertti; *also see* Yli-Hankala, Arvi
- Lin, Wen-Tzu, *see* Liu, Hung-Pin
- Liu, Hung-Pin, Wu, King-Chuen, Lu, Pao-Ping, Lin, Wen-Tzu, Wang, Yung-Liang, Li, Allen H., Wu, Rick Sai-Chuen, Tan, Peter P. C.: Delayed-onset Epinephrine-induced Pulmonary Edema, 1169
- Liu, Spencer S., *see* Hodgson, Peter S.
- Livingston, Martin: Questions Use of Nasal Cannula for Oxygen Supplementation during Cataract Surgery, 1176
- Li, Xinhui, *see* Gomes, Josenilia A.
- Lobato, Emilio B., Janelle, Gregory M., Urdaneta, Felipe, Malias, Mark A.: Noncardiogenic Pulmonary Edema and Rhabdomyolysis after Protamine Administration in a

## AUTHOR INDEX TO VOLUME 91

- Patient with Unrecognized McArdle's Disease, 303
- Lobato, Emilio B., *see* Sulek, Cheri A.
- Lobel, G., *see* Kaplan, Richard F.
- Lockwood, Geoffrey G., Dziarski, Jörg, Sapsed-Byrne, Susan M.: Potential Errors in the Measurement of Anesthetic Partial Pressure in Blood, 1550
- Lojeski, Edwin W., *see* Vidovich, Mladen I.
- London, Martin J., Shroyer, A. Laurie W., Grover, Frederick L.: Fast Tracking into the New Millennium: An Evolving Paradigm, 911
- Loop, Torsten, *see* Benzing, Albert
- López, Frank, *see* Max, Martin
- Lorber, Christine, *see* Chiari, Astrid; *also see* Ullrich, Roman
- Lowenstein, Edward: Warren Zapol: True-life Adventures in Science, Medicine, and Innovation: Recipient of the 1999 Excellence in Research Award, 917
- Lubarsky, David A., *see* Dexter, Franklin
- Lucas, Donna M., *see* Troianos, Christopher A.
- Lucas, Lorraine J.: In Reply, 896
- Lucchinetti, Eliana, *see* Zaugg, Michael
- Lück, Vanessa, *see* Heller, Axel
- Lu, Pao-Ping, *see* Liu, Hung-Pin
- Lynch, Carl, III: Anesthetic Preconditioning: Not Just for the Heart?, 606
- M**
- Macario, Alex, *see* Dexter, Franklin
- MacDonald, John F., *see* Joo, Daisy T.
- MacGillivray, Robin G.: Spontaneous Recovery after Discontinuation of Cardiopulmonary Resuscitation, 585
- Machlin, Howard, *see* Myles, Paul S.
- Macías, Antonio, *see* Panadero, Alfredo
- MacLennan, Neil, Heimbach, David M., Cullen, Bruce F.: In Reply, 320
- Ma, Daqing, Chakrabarti, Mihir K., Whitwam, James G.: Effects of Propofol and Remifentanyl on Phrenic Nerve Activity and Nociceptive Cardiovascular Responses in Rabbits, 1470
- Ma, Daqing, *see* Pac-Soo, Chen K.
- Madder, Hilary, *see* Myles, Paul S.
- Madoff, David C., *see* Manecke, Gerard R., Jr.
- Maekawa, Nobuhiro, *see* Nishina, Kaboru
- Magistretti, Pierre J., *see* Bissonnette, Bruno
- Magnúsdóttir, Helga, Kimó, Klaus, Ricksten, Sven-Erik, Elam, Mikael: High Thoracic Epidural Anesthesia Does Not Inhibit Sympathetic Nerve Activity in the Lower Extremities, 1299
- Maleck, Wolfgang H., Piper, Swen N.: Recovery after Discontinuation of Cardiopulmonary Resuscitation ("Lazarus Phenomenon"), 584
- Malias, Mark A., *see* Lobato, Emilio B.
- Malinge, Myriam, *see* Malinovsky, Jean-Marc
- Malinovsky, Jean-Marc, Renaud, Géraldine, Le Corre, Pascal, Charles, Florence, Lepage, Jean-Yves, Malinge, Myriam, Cozian, Antoine, Bouchot, Olivier, Pinaud, Michel: Intrathecal Bupivacaine in Humans: Influence of Volume and Baricity of Solutions, 1260
- Mamet, Rivka, Schoenfeld, Nili: A Reliable Diagnosis of Porphyria Should Precede any Conclusion Concerning the Safety of a Drug in Porphyria, 583
- Mancuso, Carol, *see* Williams-Russo, Pamela
- Manecke, Gerard R., Jr., Marghoob, Saad, Finzel, Kathleen C., Madoff, David C., Quijano, Irene H., Poppers, Paul J.: Catastrophic Caudal Spread of a Peritonsillar Abscess: A Case Report, 1956
- Mangano, Dennis T.: Assessment of the Patient with Cardiac Disease: An Anesthesiologist's Paradigm, 1521
- Manktelow, Claire, *see* Holzmman, Alexandra
- Mantz, Jean, *see* Gueret, Gildas; *also see* Keita, Hawa
- Marghoob, Saad, *see* Manecke, Gerard R., Jr.
- Marks, Stephen J., *see* Zisfein, James
- Marsch, Stephan C. U., Muñoz, Herman R., Dalmas, Serge, Foëx, Pierre: Interregional Differences in the Systolic and Diastolic Response of Nonischemic Myocardium to Remote Coronary Occlusion, 815
- Martin, Christian, *see* Verbrugge, Serge J. C.
- Martin, Eike, *see* Kunst, Gudrun; *also see* Weigand, Markus A.
- Martinez-Lage, Juan F., *see* Verdú, Maria Teresa
- Martino, Jean-Marc, *see* Belani, Kumar
- Martyn, J. A. Jeevendra: In Reply, 321
- Martyn, J. A. Jeevendra, Vincent, Angela: A New Twist to Myopathy of Critical Illness, 337
- Marx, Thomas, *see* Calzia, Enrico; *also see* Froeba, Gebhard
- Mascha, Edward, *see* Schubert, Armin
- Mashimo, Takashi, *see* Ueyama, Hiroshi
- Masue, Tatsuhiko, Dohi, Shuji, Asano, Toshio, Shimonaka, Hiroyuki: Spinal Antinociceptive Effect of Epidural Nonsteroidal Antiinflammatory Drugs on Nitric Oxide-induced Hyperalgesia in Rats, 198
- Mather, Laurence E., *see* Cordato, Dennis J.
- Mathie, Thomas B., *see* Troianos, Christopher A.
- Mathur, Sanjiv, Farhangkhgoee, Parviz, Karmazyn, Morris: Cardioprotective Effects of Propofol and Sevoflurane in Ischemic and Reperfused Rat Hearts: Role of  $K_{ATP}$  Channels and Interaction with the Sodium-Hydrogen Exchange Inhibitor HOE 642 (Cariporide), 1349
- Matsukawa, Takashi, *see* Goto, Takahisa
- Matsuki, Akitomo, *see* Kotani, Naoki
- Matsunaga, Matsuko, *see* Nitahara, Keiichi
- Matta, Basil F., Heath, Karen J., Tipping, Kate, Summors, Andrew C.: Direct Cerebral Vasodilatory Effects of Sevoflurane and Isoflurane, 677
- Mattis, Steven, *see* Williams-Russo, Pamela
- Max, Martin, Kühlen, Ralf, López, Frank, Reyle-Hahn, Stefan Matthias, Baumert, Jan, Hinrich, Rossaint, Rolf: Combining Partial Liquid Ventilation and Prone Position in Experimental Acute Lung Injury, 796
- Max, Mitchell B., *see* Byas-Smith, Michael G.
- Mayer, Barbara, *see* Blobner, Manfred
- Mayes, Linda C., *see* Kain, Zeev N.
- Maze, Mervyn, *see* Zhang, Chousheng
- McCaslin, Pat: *Clinical Anesthesia Procedures of the Massachusetts General Hospital*. William E. Hurford, Michael T. Bailin, J. Kenneth Davison, Kenneth L. Haspel, and Carl Rosow, 1181
- McCrystal, Conor B., *see* Murray, James M.
- McCue, Maggie, *see* Constant, Isabelle
- McDonald, William M., *see* Cooper, Robert C.
- McErlane, Shelly A., *see* Cairns, Brian E.
- McGill, Willis A., *see* Verghese, Susan T.
- McJames, Scott W., *see* Egan, Talmage D.
- McKinney, Steven, *see* Deem, Steven
- McRae, Roderick, *see* Myles, Paul S.
- Meister, Greg C., *see* Nelson, Kenneth E.
- Melendez, Luis, *see* Nguyen, Luat
- Melker, Richard J., *see* Gravenstein, Dietrich
- Mendieta, Jose Manuel, *see* Panadero, Alfredo
- Menei, Philippe, *see* Minassian, Aram Ter
- Meretoja, Olli A., *see* Korpela, Reijo
- Merle, Michel, *see* Bouaziz, Hervé
- Messmer, Konrad, *see* Spahn, Donat R.; *also see* Von Dobschuetz, Ernst
- Metsähonkala, Liisa, *see* Kaisti, Kaike K.
- Mezei, Gabor, *see* Sinclair, David R.
- Michel, André, *see* Weigand, Markus A.
- Michelsen, Luis G., Shanewise, Jack S.: The Case of the Missing Fragment: Detection and Retrieval of a Portion of Broken Valve as It Was Ejected from the Heart, 560
- Midgley, Frank M., *see* Verghese, Susan T.
- Miguel, Rafael, Witkowski, Thomas, Nagashima, Hideo, Fragen, Robert, Barkowski, Richard, Foldes, Francis F., Shanks, Colin: Evaluation of Neuromuscular and Cardiovascular Effects of Two Doses of Rapacuronium (ORG 9487) versus Mivacurium and Succinylcholine, 1648
- Mihm, Frederick G., *see* Cooper, Zachary A.
- Mikawa, Katsuya, *see* Nishina, Kaboru
- Miller, Ronald, *see* Belani, Kumar
- Minami, Toshiaki, *see* Uda, Rumiko
- Minassian, Aram Ter, Poirier, Nicolas, Pierrot, Marc, Menei, Philippe, Granry, Jean Claude, Ursino, Mauro, Beydon, Laurent: Correlation between Cerebral Oxygen Saturation Measured by Near-infrared Spectroscopy and Jugular Oxygen Saturation in Patients with Severe Closed Head Injury, 985
- Minchenko, Alexander G., *see* Armstead, Valerie E.
- Mitsuhata, Hiromasa, *see* Iseki, Masako

- Mivazerol Trial Investigators Research Group, *see* Oliver, Michael F.
- Miyamoto, Atsushi, *see* Yamamoto, Shuji
- Miyazaki, Toyo, *see* Iscki, Masako
- Moiniche, Steen, *see* Dahl, Jørgen B.
- Moloney, John, *see* Myles, Paul S.
- Mols, Georg, *see* Benzing, Albert
- Monedero, Pablo, *see* Panadero, Alfredo
- Monk, Terri G., Goodnough, Lawrence T., Brecher, Mark E., Colberg, John W., Andriole, Gerald L., Catalona, William J.: A Prospective Randomized Comparison of Three Blood Conservation Strategies for Radical Prostatectomy, 24
- Montgomery, Matthew W., *see* Toller, Wolfgang G.
- Moon, Marc R., *see* Skubas, Nikolaos J.
- Moore, Daniel C.: "Label" Versus "Labeling" of a Drug: There is a Significant Difference, 1556
- Moore, Lisa, *see* Chiari, Astrid
- Moore, William, *see* Romson, Joseph L.
- Morel, Denis R., *see* Höhn, Laurent
- Morell, Robert C., *see* Prielipp, Richard C.
- Morgan, E. Brian, *see* Myles, Paul S.
- Mori, Hidemaro, *see* Uda, Rumiko
- Mori, Kenjiro, *see* Hirakata, Hideo
- Morin, Frederick, *see* Nader, Nader D.
- Morita, Shigeo, *see* Goto, Takahisa; *also see* Nakata, Yoshinori
- Morita, Toshihiro, *see* Tsukagoshi, Hiroshi
- Moulijn, Adriaan C., *see* de Hert, Stefan G.
- Moutard, Marie-Laure, *see* Constant, Isabelle
- Muñoz, Hernan R., *see* Marsch, Stephan C. U.
- Murakawa, Masahiro, *see* Iscki, Ken
- Muraoka, Masatoshi, *see* Kotani, Naoki
- Murat, Isabelle, *see* Constant, Isabelle
- Murray, James M., Renfrew, Craig W., Bedi, Amit, McCrystal, Conor B., Jones, David S., Fee, J. P. Howard: A New Carbon Dioxide Absorbent for Use in Anesthetic Breathing Systems, 1342
- Murray, Paul A., *see* Nakayama, Masayasu
- Musley, Shailesh Kumar V., Beebe, David S., Komanduri, Vijaya, Iaizzo, Paul A., Belani, Kumar G.: Hemodynamic and Metabolic Manifestations of Acute Endotoxin Infusion in Pigs with and without the Malignant Hyperthermia Mutation, 833
- Mustafa, S. Shahzad, Rivers, Richard J., Frame, Mary D. S.: Microcirculatory Basis for Nonuniform Flow Delivery with Intravenous Nitroprusside, 723
- Muth-Selbach, Uta S., Tegeder, Irmgard, Brune, Kay, Geisslinger, Gerd: Acetaminophen Inhibits Spinal Prostaglandin E<sub>2</sub> Release after Peripheral Noxious Stimulation, 231
- Myers, Robert R., *see* Chiari, Astrid
- Myles, Paul S., Fletcher, Helen E., Cairo, Sesto, Madder, Hilary, McRae, Roderick, Cooper, James, Devonshire, Debra, Hunt, Jennifer O., Richardson, Jo, Machlin, Howard, Morgan, E. Brian, Moloney, John, Downey, Glen: Randomized Trial of Informed Consent and Recruitment for Clinical Trials in the Immediate Preoperative Period, 969
- N
- Nader, Nader D., Knight, Paul R., Bobela, Iwona, Davidson, Bruce A., Johnson, Kent J., Morin, Frederick: High-dose Nitric Oxide Inhalation Increases Lung Injury after Gastric Aspiration, 741
- Nader, Nader D., *see* Davidson, Bruce A.
- Nagashima, Hideo, *see* Miguel, Rafael
- Nagata, Taro, *see* Kansha, Masumi
- Naguib, Mohamed: In Reply, 588
- Nakamura, Kumi, *see* Hirakata, Hideo
- Nakashima, Shigeru, *see* Tan, Zhiming
- Nakata, Yoshinori, Goto, Takahisa, Ishiguro, Yoshiaki, Terui, Katsuo, Niimi, Yoshinari, Morita, Shigeo: Anesthetic Doses of Sevoflurane To Block Cardiovascular Responses to Incision when Administered with Xenon or Nitrous Oxide, 369
- Nakayama, Masayasu, Murray, Paul A.: Ketamine Preserves and Propofol Potentiates Hypoxic Pulmonary Vasoconstriction Compared with the Conscious State in Chronically Instrumented Dogs, 760
- Namiki, Akiyoshi, *see* Omote, Keiichi; *also see* Yamamoto, Shuji
- Naruse, Robert, *see* Tang, Jun
- Nau, Carla, Vogel, Werner, Hempelmann, Gunter, Bräu, Michael E.: Stereoselectivity of Bupivacaine in Local Anesthetic-sensitive Ion Channels of Peripheral Nerve, 786
- Neal, Joseph M.: *CD-ROM: Peripheral Nerve Blocks: Lower Limb and Upper Limb*. By Alain Delbos, James Eisenach, Patrick Narachi, and Louis Brasseur, 333
- Neeld, John B., Jr.: The Importance of Professional Obligations: Nonpatient Care Obligations of Anesthesiologists, 915
- Neff, Thomas A., Stocker, Reto, Wight, Edward, Spahn, Donat R.: Extreme Intraoperative Blood Loss and Hemodilution in a Jehovah's Witness: New Aspects in Postoperative Management, 1949
- Neggess, Sebastian J.C.M.M., *see* Verbrugge, Serge J. C.
- Negishi, Chiharu, *see* Akca, Ozan
- Nelson, Kenneth E., D'Angelo, Robert, Foss, Michael L., Meister, Greg C., Hood, David D., Eisenach, James C.: Intrathecal Neostigmine and Sufentanil for Early Labor Analgesia, 1293
- Neppert, Jürgen, *see* Leger, Roland
- Neuvonen, Pertti J., *see* Olkkola, Klaus T.
- Newfeld, Mark L., *see* Troianos, Christopher A.
- Nguyen, Luat, Blust, Michael, Bailin, Michael, Melendez, Luis, Raines, Douglas E.: Photosensitivity and Perioperative Polyneuropathy Complicating Orthotopic Liver Transplantation in a Patient with Erythropoietic Protoporphyrin, 1173
- Nicosia, Francesco, *see* Zappi, Lucia
- Nicosia, Siriana, *see* Zappi, Lucia
- Niemann, Claus U., *see* Henthorn, Thomas K.
- Niimi, Yoshinari, *see* Nakata, Yoshinori
- Nijima, Kuniyuki, *see* Uratsuki, Yuko
- Nikkanen, Hanna, *see* Eisenach, James C.
- Nishimura, Kenji, Kawaguchi, Masahiko, Furuya, Hitoshi: In Reply, 579
- Nishina, Kahoru, Mikawa, Katsuya, Takao, Yumiko, Mackawa, Nobuhiro, Obara, Hidefumi: Effects of Exogenous Surfactant on Acute Lung Injury Induced by Intratracheal Instillation of Infant Formula or Human Breast Milk in Rabbits, 240
- Nishino, Takashi, Shimoyama, Naohito, Ide, Tohru, Isono, Shiroh: Experimental Pain Augments Experimental Dyspnea, but Not *Vice Versa* in Human Volunteers, 1633
- Nishiyama, Tomoki, Gyermek, Laszlo, Lee, Chingmuh, Kawasaki-Yatsugi, Sachiko, Yamaguchi, Tokio: Analgesic Interaction between Intrathecal Midazolam and Glutamate Receptor Antagonists on Thermal-induced Pain in Rats, 531
- Nitahara, Keiichi, Watanabe, Ryuiku, Katori, Kiyoshi, Yamasato, Masatomo, Matsunaga, Matsuko, Dan, Kenjiro: Intubation of a Child with a Difficult Airway Using a Laryngeal Mask Airway and a Guidewire and Jet Stylet, 330
- Noe, Carl E., *see* Hamza, Mohamed A.
- Nogami, Wallace M., *see* Palmer, Craig M.
- Noguchi, Jun, *see* Inoue, Yoshitaka
- Novak, Richard J., Hill, Bradley B., Schubart, Peter J., Fogarty, Thomas J., Zarins, Christopher K.: Endovascular Aortic Aneurysm Repair in a Patient with Prohibitive Cardiopulmonary Risk, 1542
- Novalija, Enis, Fujita, Satoshi, Kampine, John P., Stowe, David F.: Sevoflurane Mimics Ischemic Preconditioning Effects on Coronary Flow and Nitric Oxide Release in Isolated Hearts, 701
- Nozawa, Yoshinori, *see* Tan, Zhiming
- Nunley, James A., *see* Klein, Stephen M.
- O
- Obara, Hidefumi, *see* Nishina, Kahoru
- Öberg, Åke, *see* Sharma, Rajiv R.
- O'Brien-Pallas, Linda L., *see* Cohen, Marsha M.
- Ohashi, Masuo, *see* Yamashita, Akiko
- Ohata, Hiroto, *see* Iida, Hiroki
- Ohguchi, Kenji, *see* Tan, Zhiming
- Ohshika, Hideyo, *see* Yamamoto, Shuji
- Ohtsuka, Mikiko, *see* Uda, Rumiko
- Okamoto, Michiko, *see* Lien, Cynthia A.
- Olavide, Isidro, *see* Panadero, Alfredo
- Olieman, Wim, *see* Kuipers, Jette A.
- Oliver, Michael F., Goldman, Lee, Julian,

## AUTHOR INDEX TO VOLUME 91

- Desmond G., Holme, Ingar, Mivazerol Trial Investigators Research Group: Effect of Mivazerol on Perioperative Cardiac Complications during Non-cardiac Surgery in Patients with Coronary Heart Disease: The European Mivazerol Trial (EMIT), 951
- Olkkola, Klaus T., Palkama, Vilja J., Neuvonen, Pertti J.: Ritonavir's Role in Reducing Fentanyl Clearance and Prolonging Its Half-life, 681
- Omote, Keiichi, Kawamata, Tomoyuki, Imaizumi, Hitoshi, Namiki, Akiyoshi: Case of Cowden's Disease that Caused Airway Obstruction during Induction of Anesthesia, 1537
- Omote, Keiichi, *see* Kawamata, Tomoyuki
- Ondra, Stephen, *see* Benzon, Honorio T.
- Opentanova, Irina L., *see* Armstead, Valerie E.
- Oroudji, Mohammad, *see* Chatel, Didier
- Orser, Beverley A., *see* Joo, Daisy T.
- Osaka, Yoshiko, *see* Yamashita, Masao
- Osawa, Masami, *see* Kakuyama, Mashihiro
- Otsuka, Mikiko, *see* Uda, Rumiko
- Oury, Jean-François, *see* Gueret, Gildas
- Ousta, Basil, *see* Pickering, Anthony E.
- Overdyk, Frank, Rust, Philip: Prediction Bounds for Case Scheduling: Interpret with Caution, 589
- Ozaki, Makoto, *see* Belani, Kumar; *also see* Goto, Takahisa
- Ozer, Steven, Benumof, Jonathan L.: Oro- and Nasogastric Tube Passage in Intubated Patients: Fiberoptic Description of Where They Go at the Laryngeal Level and How to Make Them Enter the Esophagus, 137
- Ozturk, Ertan, Izdes, Seval, Babacan, Avni, Kaya, Kadir: In Reply, 592
- P**
- Pac-Soo, Chen K., Ma, Daqing, Wang, Chen, Chakrabarti, Mihir K., Whitwam, James G.: Specific Actions of Halothane, Isoflurane, and Desflurane on Sympathetic Activity and A $\delta$  and C Somatosympathetic Reflexes Recorded in Renal Nerves in Dogs, 470
- Pagel, Paul S., *see* Toller, Wolfgang G.
- Palkama, Vilja J., *see* Olkkola, Klaus T.
- Palmer, Craig M., Van Maren, Gretchen, Nogami, Wallace M., Alves, Diane: Bupivacaine Augments Intrathecal Fentanyl for Labor Analgesia, 84
- Palm, Sebastian, *see* Leger, Roland
- Panadero, Alfredo, Monedero, Pablo, Olavide, Isidro, Fernández-Liesa, Ignacio, Mendietta, Jose Manuel, Macias, Antonio: Inflation of the Endotracheal Tube Cuff in the Pharynx for Ventilation of Paralyzed Patients with Unanticipated Difficult Airway, 1178
- Pan, Hui-Lin, *see* Chiari, Astrid; *also see* Eisenach, James C.; *also see* Gomes, Jose-nilia A.
- Panigada, Mauro, *see* Pelosi, Paolo
- Pan, Shiow-Lin, *see* Lin, Chih-Chung
- Panzer, Oliver, *see* Akça, Ozan
- Pappius, Hanna M., *see* Archer, David P.
- Paqueron, Xavier, *see* Bouaziz, Hervé
- Paquin, Sandrine, *see* Chatel, Didier
- Parmley, C. Lee, *see* Pousman, Robert M.
- Parry, Martin G., *see* Pickering, Anthony E.
- Partridge, Brian L.: Plagiarism and Authorship, 324
- Pasqual, Roberta T., *see* Troianos, Christopher A.
- Pastor, Darwin, *see* Romson, Joseph L.
- Patel, Ramesh I., *see* Verghese, Susan T.
- Paulsen, Friedrich P., Rudert, Heinrich H., Tillmann, Bernhard N.: New Insights into the Pathomechanism of Postintubation Arytenoid Subluxation, 659
- Pavlin, D. Janet, Arends, Rosalin H., Gunn, Holly C., Van Norman, Gail, Koerschgen, Megan E., Shen, Danny D.: Optimal Propofol-Alfentanil Combinations for Supplementing Nitrous Oxide for Outpatient Surgery, 97
- Pavlin, D. Janet, Pavlin, Edward G., Fitzgibbon, Dermot R., Koerschgen, Megan E., Plitt, Terry M.: Management of Bladder Function after Outpatient Surgery, 42
- Pavlin, Edward G., *see* Pavlin, D. Janet
- Pazhur, Johannes, *see* Froeba, Gebhard
- Pearce, Robert A.: Barbiturates and the Brain: Disrupting the Delicate Balance, 1190
- Pellegrini, Ronald V., *see* Troianos, Christopher A.
- Pellerin, Luc, *see* Bissonnette, Bruno
- Pelosi, Paolo, Ravagnan, Irene, Giurati, Gabriella, Panigada, Mauro, Bottino, Nicola, Tredici, Stefano, Eccher, Giuditta, Gattinoni, Luciano: Positive End-expiratory Pressure Improves Respiratory Function in Obese but not in Normal Subjects during Anesthesia and Paralysis, 1221
- Péquignot, François, *see* Clergue, François
- Pere, Pertti, Lindgren, Leena, Vaara, Martti: Poor Antibacterial Effect of Ropivacaine: Comparison with Bupivacaine, 884
- Pertovaara, Antti, *see* Wei, Hong
- Pesenti, Antonio, *see* Bigatello, Luca M.
- Pesonen, Eero J., Vento, Antti E., Rämö, O. Juhani, Vuorte, Juha, Jansson, Sten-Erik, Repo, Heikki: Nitcapone Reduces Cardiac Neutrophil Accumulation in Clinical Open Heart Surgery, 355
- Peters, Jürgen, *see* Groeben, Harald
- Peterson, Margaret G., *see* Williams-Russo, Pamela
- Philip, Ivan, *see* Chatel, Didier
- Piat, Véronique, *see* Constant, Isabelle
- Pickering, Anthony E., Parry, Martin G., Ousta, Basil, Fernando, Roshan: Effect of Combined Spinal-Epidural Ambulatory Labor Analgesia on Balance, 436
- Pierrot, Marc, *see* Minassian, Aram Ter
- Pinaud, Michel, *see* Malinovsky, Jean-Marc
- Pinchak, Alfred C., *see* Smith, Charles E.
- Pinchak, Anna B., *see* Smith, Charles E.
- Piper, Swen N., *see* Maleck, Wolfgang H.
- Plantefève, Gactan, *see* Chatel, Didier
- Plaud, Benoît, *see* Donati, François
- Plitt, Terry M., *see* Pavlin, D. Janet
- Plöchl, Walter, *see* Sungurtekin, Hulya
- Plotkin, Jeffrey S., *see* Schroeder, Rebecca A.
- Plourde, Gilles: Auditory Evoked Potentials and 40-Hz Oscillations: An Opportunity To Study Mechanisms of Action of General Anesthetics?, 1187
- Podolsky, Andrea, *see* Akça, Ozan
- Poelaert, Jan I., *see* Schmidt, Christoph
- Poirier, Nicolas, *see* Minassian, Aram Ter
- Poliac, Marius, *see* Belani, Kumar
- Polissar, Nayak L., *see* Deem, Steven
- Poppers, Paul J., *see* Manecke, Gerard R., Jr.
- Porter, Joan, *see* Cohen, Marsha M.
- Posner, Karen L., Freund, Peter R.: Trends in Quality of Anesthesia Care Associated with Changing Staffing Patterns, Productivity, and Concurrence of Case Supervision in a Teaching Hospital, 839
- Posner, Karen L., *see* Domino, Karen B.
- Poth, N., *see* Gautier, Ph. E.
- Pousman, Robert M., Parmley, C. Lee: Cardiogenic Failure after Isolated Neurologic Injury: A Report of Two Cases, 1165
- Praisman, Sergey, Cheng, Davy C. H.: Life-threatening Ventricular Dysrhythmias with Inadvertent Asynchronous Temporary Pacing after Cardiac Surgery, 880
- Prielipp, Richard C., Morell, Robert C., Walker, Francis O., Santos, Carlos C., Bennett, Judy, Butterworth, John: Ulnar Nerve Pressure: Influence of Arm Position and Relationship to Somatosensory Evoked Potentials, 345
- Proost, Johannes H., Schiere, Sjouke, Beaufort, Ton M., Wierda, J. Mark K. H.: Rapid Onset/Offset of Rapacurium Bromide Explained?, 1554
- Provencher, Sophie, *see* Chatel, Didier
- Provencher, Jean, *see* Chiari, Astrid
- Pua, Hwee Ling, *see* Swan, Hilton D.
- Pühringer, Fritz: Pharyngeal Mucosal Pressure and Perfusion: A Fiberoptic Evaluation of the Posterior Pharynx in Anesthetized Adult Patients with a Modified Cuffed Oropharyngeal Airway, 1661
- Purdy, Robert, Bevan, David R., Donati, François, Lichtor, J. Lance: Early Reversal of Rapacurium with Neostigmine, 51
- Q**
- Qian, Fang, *see* Dexter, Franklin
- Quijano, Irene H., *see* Manecke, Gerard R., Jr.
- Quist, Robert Jan: Regression of Sensory Analgesia with Lumbar Epidural Catheters, 317

## R

- Radermacher, Peter, *see* Calzia, Enrico; *also see* Froeba, Gebhard
- Radesic, Brian P., *see* Smith, Charles E.
- Ragaller, Maximilian, *see* Bleyl, Jörg U.
- Raines, Douglas E., Zachariah, Vinu T.: The Alkyl Chain Dependence of the Effect of Normal Alcohols on Agonist-induced Nicotinic Acetylcholine Receptor Desensitization Kinetics, 222
- Raines, Douglas E., *see* Nguyen, Luat
- Rajan, Govind R. C.: Supraglottic Obstruction *versus* True Laryngospasm: The Best Treatment, 581
- Raja, Srinivasa N., Haythornthwaite, Jennifer A.: Anesthetic Management of the Elderly: Measuring Function beyond the Immediate Perioperative Horizon, 909
- Rajek, Angela, *see* Lenhardt, Rainer
- Rämö, O., Juhani, *see* Pesonen, Eero J.
- Rampil, Ira J., *see* Dutton, Robert C.
- Ranawat, Chitranjan, *see* Williams-Russo, Pamela
- Rantala, Arto, *see* Ensinger, Hermann
- Rapf, Brigitta, *see* Greif, Robert
- Rasche, Stefan, *see* Bleyl, Jörg U.
- Ravagnan, Irene, *see* Pelosi, Paolo
- Ravussin, Patrick, *see* Bissonnette, Bruno
- Reidy, L. Brian, *see* Fitzgibbon, Dermot R.
- Rebel, Annette, *see* Lenz, Christian
- Rebufat, Yves, *see* Duvaldestin, Philippe
- Redl, Gerhard: In Reply, 580
- Regner, Mike, *see* Bleyl, Jörg U.
- Rehberg, Benno, Bouillon, Thomas, Zinserling, Jörg, Hoeft, Andreas: Comparative Pharmacodynamic Modeling of the Electroencephalography-slowing Effect of Isoflurane, Sevoflurane, and Desflurane, 397
- Rehberg, Benno, Duch, Daniel S.: Suppression of Central Nervous System Sodium Channels by Propofol, 512
- Rehder, Kai, *see* Zappi, Lucia
- Reibold, Jan-Peter, *see* Spahn, Donat R.
- Reichard, Peter S., *see* Sattari, Rouzbeh
- Reich, David L., *see* Zaugg, Michael
- Reichle, Florian M., *see* Heindl, Bernhard
- Reiz, Sebastian, *see* Sharma, Rajiv R.
- Renaud, Géraldine, *see* Malinovsky, Jean-Marc
- Renfrew, Craig W., *see* Murray, James M.
- Repo, Heikki, *see* Pesonen, Eero J.
- Reuben, Scott S., Steinberg, Robert: Gastric Perforation Associated with the Use of Celecoxib, 1548
- Reuben, Scott S., Steinberg, Robert B., Klatt, Jonathan L., Klatt, Margaret L.: Intravenous Regional Anesthesia Using Lidocaine and Clonidine, 654
- Reyford, Hugo, *see* Belani, Kumar
- Reyle-Hahn, Stefan Matthias, *see* Max, Martin
- Reynolds, Lynne M., Infosino, Andrew, Brown, Ronald, Hsu, James, Fisher, Dennis M.: Intramuscular Rapacuronium in Infants and Children: Dose-ranging and Tracheal Intubating Conditions, 1285
- Richardson, Charles A., *see* Talke, Pekka
- Richardson, Jo, *see* Myles, Paul S.
- Rich, George F., *see* Fischer, Lars G.
- Richter, Richard, *see* Romson, Joseph L.
- Ricksten, Sven-Erik, *see* Magnúsdóttir, Helga
- Riddle, Raymond T.: In Reply, 895
- Rigor, Benjamin M., *see* Balatbat, Joselito T.
- Rinne, Juha O., *see* Kaisti, Kaike K.
- Ripart, Jacques, *see* Aya, Antoine G.
- Ritche, Michael, *see* Khalil, Samia
- Rittenhouse, Brian E., *see* Choinière, Manon
- Rivers, Richard J., *see* Mustafa, S. Shahzad
- Robert, Emmanuelle, *see* Aya, Antoine G.
- Roberts, Steven A., *see* Langevin, Paul B.
- Robinovitz, Elaine, *see* Byas-Smith, Michael G.
- Robinson, Richard J. S.: The Use of Side-stream Spirometry To Assess Air Leak during and after Lung Volume Reduction Surgery, 571
- Rocke, D. Anthony, *see* Rout, Chris
- Röder, Georg, *see* Ullrich, Roman
- Roder, John, *see* Joo, Daisy T.
- Roewer, Norbert, *see* Apfel, Christian C.
- Roistacher, Nancy, *see* Amar, David
- Romson, Joseph L., Leung, Jacqueline M., Bellows, Wayne H., Bronstein, Merrill, Keith, Fraser, Moores, William, Flachs-bart, Keith, Richter, Richard, Pastor, Darwin, Fisher, Dennis M.: Effects of Dobutamine on Hemodynamics and Left Ventricular Performance after Cardiopulmonary Bypass in Cardiac Surgical Patients, 1318
- Roosens, Carl, *see* Schmidt, Christoph
- Rose, D. Keith, *see* Cohen, Marsha M.
- Rosenbaum, Stanley H.: Ethical Conflicts, 3
- Rosenfeld, Brian A., Balser, Jeffrey R.: In Reply, 324
- Rosen, Mark A.: Management of Anesthesia for the Pregnant Surgical Patient, 1159
- Rosenne, Ella, *see* Ben-Eliyahu, Shamgar
- Rossaint, Rolf, *see* Max, Martin
- Roth, Doreen L. Wray, *see* Lien, Cynthia A.
- Rout, Chris, Rocke, D. Anthony: Spinal Hypotension Associated with Cesarean Section: Will Preload Ever Work?, 1565
- Rubenovitch, Josh, *see* Capdevila, Xavier
- Rudert, Heinrich H., *see* Paulsen, Friedrich P.
- Rust, Philip, *see* Overdyk, Frank
- Ruttimann, Urs E., *see* Verghese, Susan T.
- Ryckman, J. Victor, *see* Schubert, Armin
- Ryckwaert, Yves, *see* Capdevila, Xavier

## S

- Sabnis, Salas S., *see* Wagner, Larry E., II
- Sagata, Kenichiro, *see* Uratsugi, Yuko
- Saissi, Gilbert, *see* Aya, Antoine G. M.
- Sakimura, Kenji, *see* Yamakura, Tomohiro
- Salvati, Eduardo, *see* Williams-Russo, Pamela
- Sánchez-Guijo, Juan J., Benavente, María A., Crespo, Angel: Failure of a Patient-controlled Analgesia Pump in a Hyperbaric Environment, 1540
- Sandler, Alan, *see* Wong, David T.
- Sandler, Alan N., *see* Boylan, John F.
- Santos, Carlos C., *see* Prielipp, Richard C.
- Sapsed-Byrne, Susan M., *see* Lockwood, Geoffrey G.
- Sarier, Kaya, *see* Shore-Lesserson, Linda
- Särkelä, Mika, *see* Yli-Hankala, Arvi
- Sata, Takeyoshi, *see* Inoue, Yoshitaka
- Sattari, Rouzbeh, Reichard, Peter S.: Temporary Malfunction of the Ohmeda Modulus CD Series Volume Monitor Caused by the Overhead Surgical Lighting, 894
- Savarese, John J., *see* Lien, Cynthia A.
- Scheinin, Harry, *see* Kaisti, Kaike K.
- Schiere, Sjouke, *see* Proost, Johannes H.
- Schmeck, Joachim, *see* Heller, Axel
- Schmeling, William T., *see* Staunton, Michael
- Schmidt, Christina, *see* Bouillon, Thomas
- Schmidt, Christoph, Roosens, Carl, Struys, Michel, Deryck, Yvon L. J. M., Van Nooten, Guido, Colardyn, Francis, Van Aken, Hugo, Poelaert, Jan L.: Contractility in Humans after Coronary Artery Surgery: Echocardiographic Assessment with Preload-adjusted Maximal Power, 58
- Schmidt, Jes F., *see* Wang, Lars P.
- Schoenfeld, Nili, *see* Mamet, Rivka
- Schoonderwaldt, Hennie C., *see* Crul, Ben J. P.
- Schreiner, Rupert, *see* Kunst, Gudrun
- Schroeder, Frank, *see* Horn, Ernst-Peter
- Schroeder, Rebecca A., Johnson, Lynt B., Plotkin, Jeffrey S., Kuo, Paul C., Klein, Andrew S.: Total Blood Transfusion and Mortality after Orthotopic Liver Transplantation, 329
- Schubart, Peter J., *see* Novak, Richard J.
- Schubert, Armin, Tetzlaff, John E., Tan, Ming, Ryckman, J. Victor, Mascha, Edward: Consistency, Inter-rater Reliability, and Validity of 441 Consecutive Mock Oral Examinations in Anesthesiology: Implications for Use as a Tool for Assessment of Residents, 288
- Schultz, Anette-Marie, *see* Akça, Ozan
- Schulz-Stübner, Sebastian: Liquid Ventilation: A Theoretically Beneficial Approach in Treating Systemic Air Embolism in Lung Trauma, 1963
- Schweizer, Alexandre, *see* Höhn, Laurent
- Schwilden, Helmut, *see* Bouillon, Thomas; *also see* Glen, J. B. (Jain)
- Sculco, Thomas, *see* Williams-Russo, Pamela
- Segal, Scott, Blatman, Robert, Doble, Melissa, Datta, Sanjay: The Influence of the Obstetrician in the Relationship between Epidural Analgesia and Cesarean Section for Dystocia, 90
- Segal, Scott, *see* Tsen, Lawrence C.
- Sell, Jeffrey E., *see* Verghese, Susan T.
- Sessler, Daniel I.: In Reply, 583
- Sessler, Daniel I., *see* Akça, Ozan; *also see*

## AUTHOR INDEX TO VOLUME 91

- Goto, Takahisa; *also see* Greif, Robert; *also see* Horn, Ernst-Peter; *also see* Kotani, Naoki; *also see* Kotani, Naoki; *also see* Lenhardt, Rainer
- Seto, Atsushi, *see* Aoyama, Kazuyoshi
- Shafer, Steven L.: *Mathematics and Statistics in Anaesthesia*. By Steven Cruickshank, 1181
- Shakhar, Guy, *see* Ben-Eliyahu, Shamgar
- Shanewise, Jack S., *see* Michelsen, Luis G.
- Shanks, Colin, *see* Miguel, Rafael
- Shanks, Colin A., *see* Henthorn, Thomas K.
- Shanley, Thomas P., *see* Davidson, Bruce A.
- Sharbrough, Frank W., *see* Keegan, Mark T.
- Sharma, Rajiv R., Axelsson, Hans, Öberg, Åke, Jansson, Erica, Clergue, Francois, Johansson, Göran, Reiz, Sebastian: *Diaphragmatic Activity after Laparoscopic Cholecystectomy*, 406
- Sharrock, Nigel E., *see* Williams-Russo, Pamela
- Shen, Danny D., *see* Pavlin, D. Janet
- Shibuya, Izumi, *see* Inoue, Yoshitaka
- Shigematsu, Akio, *see* Inoue, Yoshitaka
- Shimizu, Sachiko, *see* Uda, Rumiko
- Shimoji, Koki, *see* Yamakura, Tomohiro
- Shimonaka, Hiroyuki, *see* Masue, Tatsuhiro
- Shimoyama, Naohito, *see* Nishino, Takashi
- Shore-Lesserson, Linda, Ammar, Tameshwar, DePerio, Marietta, Vela-Cantos, Frances, Fisher, Cherie, Sarier, Kaya: *Platelet-activated Clotting Time Does Not Measure Platelet Reactivity during Cardiac Surgery*, 362
- Shroyer, A. Laurie W., *see* London, Martin J.
- Shyr, Ming-Hwang, *see* Lin, Chih-Chung
- Siddiqui, Talha, *see* Benzon, Honorio T.
- Sidebotham, George W., *see* Wolf, Gerald L.
- Sidhu, Tejvir S., *see* Smith, Charles E.
- Silverstein, Jeffrey H., *see* Zaugg, Michael
- Sinclair, David R., Chung, Frances, Mezei, Gabor: *Can Postoperative Nausea and Vomiting Be Predicted?*, 109
- Singh, P. K., *see* Sinha, Prabhat K.
- Singh, Surendra, *see* Sinha, Prabhat K.
- Sinha, Prabhat K., Dubey, Prakash K., Gaur, Atul, Singh, P. K., Singh, Surendra: *Plethysmographic Pulse Oximeter Waveform Variation as an Indicator of Successful Epidural Blockade: A Prospective Study*, 899
- Skinner, Stacy, *see* Langevin, Paul B.
- Skubas, Nikolaos J., Despotis, George J., Vlasnic, Jon J., Moon, Marc R.: *Preoperative Use of Enoxaparin and Tirofiban: Possible Association with Increased Bleeding Postbypass*, 869
- Sladen, Robert N., *see* Ullrich, Roman
- Slavov, Velislav, *see* Duvaldestin, Philippe
- Sloninsky, Alexander, *see* Tang, Jun
- Smith, Charles E., Pinchak, Anna B., Sidhu, Tejvir S., Radesic, Brian P., Pinchak, Alfred C., Hagen, Joan F.: *Evaluation of Tracheal Intubation Difficulty in Patients with Cervical Spine Immobilization: Fiberoptic (WuScope) Versus Conventional Laryngoscopy*, 1253
- Smith, Warren D., *see* Dutton, Robert C.
- Soja, Peter J., *see* Cairns, Brian E.
- Song, Pingfang, *see* Zappi, Lucia
- Sonner, Jim, *see* Joo, Daisy T.
- Spahn, Donat R., Van Brempt, Ronald, Theimeier, Gregor, Reibold, Jan-Peter, Welte, Martin, Heinzerling, Hartmut, Birk, Katrin M., Keipert, Peter E., Messmer, Konrad: *European Perflubron Emulsion Study Group: Perflubron Emulsion Delays Blood Transfusions in Orthopedic Surgery*, 1195
- Spahn, Donat R., *see* Neff, Thomas A.
- Spiliopoulos, Anastase, *see* Höhn, Laurent
- Spillane, William F.: *Pain and Suffering, 1971*
- Staats, Peter S.: *Atlas of Interventional Pain Management*. By Steve Waldman, 597
- Staats, Peter S., *see* Dougherty, Patrick M.
- Stadler, Josef, *see* Blobner, Manfred
- Stafforst, Dieter, *see* Bouillon, Thomas
- Stahl, Wolfgang, *see* Calzia, Enrico
- Standl, Thomas, *see* Horn, Ernst-Peter
- Stanski, Donald R., *see* Glen, J. B. (Iain)
- Staunton, Michael, Drexler, Cathy, Dulitz, Michael G., Ekbo, Dale C., Schmeling, William T., Farber, Neil E.: *Effects of Hypoxia-Reoxygenation on Microvascular Endothelial Function in the Rat Hippocampal Slice*, 1462
- Steele, Susan M., *see* Klein, Stephen M.
- Steinberg, Jonathan S., *see* Amar, David
- Steinberg, Robert, *see* Reuben, Scott S.
- Steinberg, Robert B., *see* Reuben, Scott S.
- Stekiel, Thomas A., Kokita, Naohiro, Yamazaki, Mitsuaki, Bosnjak, Zeljko J., Kampine, John P., Stekiel, William J.: *Effect of Isoflurane on In Situ Vascular Smooth Muscle Transmembrane Potential in Spontaneous Hypertension*, 207
- Stekiel, William J., *see* Stekiel, Thomas A.
- Stephens, Derek, *see* Swan, Hilton D.
- Steudel, Wolfgang, Hurford, William E., Zapol, Warren M.: *Inhaled Nitric Oxide: Basic Biology and Clinical Applications*, 1090
- Steudel, Wolfgang, *see* Weimann, Jörg
- Still, Ann C.: *Churchill's Pocketbook of Pain*. By Catherine F. Stannard and Sara Booth, 332
- Stocker, Reto, *see* Neff, Thomas A.
- Stocking, John E., *see* Balatbat, Joselito T.
- Stowe, David F., *see* Novalija, Enis
- Struys, Michel, *see* Schmidt, Christoph
- Stuth, Eckehard A. E., Krolo, Mirko, Tonkovic-Capin, Mislav, Hopp, Francis A., Kampine, John P., Zuperku, Edward J.: *Effects of Halothane on Synaptic Neurotransmission to Medullary Expiratory Neurons in the Ventral Respiratory Group of Dogs*, 804
- Sulek, Cheri A., Davies, Laurie K., Enneking, F. Kayser, Gearen, Peter A., Lobato, Emilio B.: *Cerebral Microembolism Diagnosed by Transcranial Doppler during Total Knee Arthroplasty: Correlation with Transesophageal Echocardiography*, 672
- Summers, Andrew C., *see* Matta, Basil F.
- Sungurtekin, Hulya, Plöchl, Walter, Cook, David J.: *Relationship between Cardiopulmonary Bypass Flow Rate and Cerebral Embolization in Dogs*, 1387
- Swan, Hilton D., Crawford, Mark W., Pua, Hwee Ling, Stephens, Derek, Lerman, Jerrold: *Additive Contribution of Nitrous Oxide to Sevoflurane Minimum Alveolar Concentration for Tracheal Intubation in Children*, 667
- Swenson, Erik R., *see* Deem, Steven
- Sypula, Richard W., *see* Troianos, Christopher A.

## T

- Tagliente, Thomas, *see* Zaugg, Michael
- Taha, Samar K., *see* Baraka, Anis S.
- Takahashi, Kenichiro, *see* Tsukagoshi, Hiroshi
- Takahashi, Satoshi, *see* Kotani, Naoki
- Takahashi, Shosuke, *see* Kansha, Masumi
- Takala, Jukka, *see* Ensinger, Hermann
- Takala, Jukka A., *see* Tenhunen, Jyrki J.
- Takao, Yumiko, *see* Nishina, Kahoru
- Takata, Masao, *see* Weimann, Jörg
- Takenaka, Ichiro, *see* Aoyama, Kazuyoshi
- Talke, Pekka, Caldwell, James E., Richardson, Charles A.: *Sevoflurane Increases Lumbar Cerebrospinal Fluid Pressure in Normocapnic Patients Undergoing Transphenoidal Hypophysectomy*, 127
- Tanabe, Yutaka, *see* Iseki, Masako
- Tang, Jun, Chen, Lei, White, Paul F., Watcha, Mehernoor F., Wender, Ronald H., Naruse, Robert, Kariger, Robert, Sloninsky, Alexander: *Recovery Profile, Costs, and Patient Satisfaction with Propofol and Sevoflurane for Fast-track Office-based Anesthesia*, 253
- Tanigami, Hironobu, *see* Ueyama, Hiroshi
- Tan, Ming, *see* Schubert, Armin
- Tan, Peter P. C., *see* Lin, Chih-Chung; *also see* Liu, Hung-Pin
- Tan, Zhiming, Dohi, Shuji, Ohguchi, Kenji, Nakashima, Shigeru, Nozawa, Yoshinori: *Local Anesthetics Inhibit Muscarinic Receptor-mediated Activation of Extracellular Signal-regulated Kinases in Rat Pheochromocytoma PC12 Cells*, 1014
- Tarkkila, Pekka, *see* Tsui, Ban C. H.
- Tashiro, Chikara, *see* Tsujimoto, Saburo
- Taut, Friedemann J. H., *see* Holzmänn, Alexandra
- Tegeder, Irmgard, *see* Muth-Selbach, Uta S.
- ten Broecke, Pieter W., *see* de Hert, Stefan G.
- Tenhunen, Jyrki J., Kosunen, Hannu, Alhava, Esko, Tuomisto, Leena, Takala, Jukka A.: *Intestinal Luminal Microdialysis: A New Approach To Assess Gut Mucosal Ischemia*, 1807
- TerRiet, Menno F., *see* Jacobs, Jeffrey S.
- Terui, Katsuo, *see* Nakata, Yoshinori

- Tetzlaff, John E., *see* Schubert, Armin  
 Theilmeier, Gregor, *see* Spahn, Donat R.  
 Thomas, John A.: *Handbook of Clinical Anesthesia*, 3rd Edition. Edited by Paul G. Barash, Bruce F. Cullen, and Robert K. Stoelting, 332  
 Thomas, John A.: *Pharmacology & Physiology in Anesthesia Practice*, 3rd edition. By Robert K. Stoelting, 597  
 Thrush, David N., Downs, John B.: Vagotonia and Cardiac Arrest during Spinal Anesthesia, 1171  
 Thue, Brad, *see* Tsen, Lawrence C.  
 Tibshirani, Robert, *see* Wong, David T.  
 Tillmann, Bernhard N., *see* Paulsen, Friedrich P.  
 Tilly, Jonathan L., *see* Xu, Lijun  
 Ting, Paul H.: *Hewlett Packard Anesthesiology Village*, 1183  
 Tipping, Kate, *see* Matta, Basil F.  
 Tkachenko, Igor, *see* Ismael, Mohamed S.  
 Tobias, Joseph D., *see* Easley, R. Blaine  
 Tobin, Joseph R., *see* Chiari, Astrid  
 Toda, Hiroshi, *see* Hirakata, Hideo; *also see* Kakuyama, Mashiho  
 Todd, Michael M.: Comment, 321  
 Todd, Michael M.: In Reply, 325  
 Todd, Michael M., Brown, David L.: Regional Anesthesia and Postoperative Pain Management: Long-term Benefits from a Short-term Intervention, 1  
 Toller, Wolfgang G., Kersten, Judy R., Pagel, Paul S., Hettrick, Douglas A., Wartier, David C.: Sevoflurane Reduces Myocardial Infarct Size and Decreases the Time Threshold for Ischemic Preconditioning in Dogs, 1437  
 Toller, Wolfgang G., Montgomery, Matthew W., Pagel, Paul S., Hettrick, Douglas A., Wartier, David C., Kersten, Judy R.: Isoflurane-enhanced Recovery of Canine Stunned Myocardium: Role for Protein Kinase C?, 713  
 Tomlin, Keith, *see* Williams, Andrea R.  
 Tong, Chuanyao, *see* Eisenach, James C.  
 Tonkovic-Capin, Mislav, *see* Stuth, Eckehard A. E.  
 Traub, Rodney D., *see* Dexter, Franklin  
 Tredici, Stefano, *see* Pelosi, Paolo  
 Tremper, Kevin K.: Perfluorochemical "Blood Substitutes": Indications for an Oxygen-carrying Colloid, 1185  
 Trépanier, Claude A., *see* Langevin, Stephan  
 Troianos, Christopher A., Sypula, Richard W., Lucas, Donna M., D'Amico, Frank, Mathie, Thomas B., Desai, Manish, Pasqual, Roberta T., Pellegrini, Ronald V., Newfield, Mark L.: The Effect of Prophylactic  $\epsilon$ -Aminocaproic Acid on Bleeding, Transfusions, Platelet Function, and Fibrinolysis during Coronary Artery Bypass Grafting, 430  
 Tschö, Uwe, *see* Bleyl, Jörg U.  
 Tsen, Lawrence C.: *Recent Advances in Anesthesia & Analgesia*, Number 20. Edited by A. P. Adams and J. N. Cashman, 598  
 Tsen, Lawrence C., Thue, Brad, Datta, Sanjay, Segal, Scott: Is Combined Spinal-Epidural Analgesia Associated with More Rapid Cervical Dilation in Nulliparous Patients When Compared with Conventional Epidural Analgesia?, 920  
 Tsui, Ban C. H., Tarkkila, Pekka, Gupta, Sunil, Kearney, Ramona: Confirmation of Caudal Needle Placement Using Nerve Stimulation, 374  
 Tsujimoto, Saburo, Fujiwara, Syunsuke, Tashiro, Chikara: How To Perform Differential Lung Ventilation in Pediatric Cases?, 327  
 Tsukagoshi, Hiroshi, Morita, Toshihiro, Takahashi, Kenichiro, Kunimoto, Fumio, Goto, Fumio: Cecal Ligation and Puncture Peritonitis Model Shows Decreased Nicotinic Acetylcholine Receptor Numbers in Rat Muscle: Immunopathologic Mechanisms?, 448  
 Tuomisto, Leena, *see* Tenhunen, Jyrki J.  
 Tzeng, Gary, *see* Cuenca, Joseph
- U**
- Uda, Rumiko, Kadono, Noriko, Otsuka, Mikiko, Shimizu, Sachiko, Mori, Hidemaro: Strict Temperature Control Has No Effect on Injection Pain with Propofol, 591  
 Uda, Rumiko, Ohtsuka, Mikiko, Minami, Toshiaki, Mori, Hidemaro: Use of a Lighted Stylet for Tracheal Intubation through an Intubating Port of a Mask, 1560  
 Uejima, T., *see* Kaplan, Richard F.  
 Ueta, Yoichi, *see* Inoue, Yoshitaka  
 Ueyama, Hiroshi, He, Yan-Ling, Tanigami, Hironobu, Mashimo, Takashi, Yoshiya, Ikuto: Effects of Crystalloid and Colloid Preload on Blood Volume in the Parturient Undergoing Spinal Anesthesia for Elective Cesarean Section, 1571  
 Uezono, Shoichi, *see* Goto, Takahisa  
 Uhlig, Stefan, *see* Verbrugge, Serge J. C.  
 Ullrich, Roman, Lorber, Christine, Röder, Georg, Urak, Georg, Faryniak, Barbara, Sladen, Robert N., Germann, Peter: Controlled Airway Pressure Therapy, Nitric Oxide Inhalation, Prone Position, and Extracorporeal Membrane Oxygenation (ECMO) as Components of an Integrated Approach to ARDS, 1577  
 Urabe, Nobukata, *see* Hirakata, Hideo  
 Urak, Georg, *see* Ullrich, Roman  
 Uratsuji, Yuko, Ijichi, Kazuko, Irie, Jun, Sagata, Kenichiro, Nijima, Kuniyuki, Kitamura, Sanji: Rhabdomyolysis after Abdominal Surgery in the Hyperlordotic Position Enforced by Pneumatic Support, 310  
 Urban, Bernd W., *see* Friederich, Patrick  
 Urdaneta, Felipe, *see* Lobato, Emilio B.
- V**
- Vakkuri, Akshay S., *see* Hamza, Mohamed A.  
 Vakkuri, Anne, *see* Yli-Hankala, Arvi  
 Van Ackern, Klaus, *see* Lenz, Christian  
 Van Aken, Hugo, *see* Schmidt, Christoph  
 Van Breet, Ronald, *see* Spahn, Donat R.  
 Van Dongen, Robert T. M., *see* Crul, Ben J. P.  
 Van Maren, Gretchen, *see* Palmer, Craig M.  
 Van Nooten, Guido, *see* Schmidt, Christoph  
 Van Norman, Gail, *see* Pavlin, D. Janet  
 Van Norman, Gail A.: A Matter of Life and Death: What Every Anesthesiologist Should Know about the Medical, Legal, and Ethical Aspects of Declaring Brain Death, 275  
 Van Steenberghe, A., *see* Gautier, Ph. E.  
 Veihelmann, Andreas, *see* Blobner, Manfred  
 Vela-Cantos, Frances, *see* Shore-Lesserson, Linda  
 Vento, Antti E., *see* Pesonen, Eero J.  
 Verbrugge, Serge J. C., Uhlig, Stefan, Neggers, Sebastian J.C.M.M., Martin, Christian, Held, Heinz-Dieter, Haitsma, Jack J., Lachmann, Burkhard: Different Ventilation Strategies Affect Lung Function but Do Not Increase Tumor Necrosis Factor- $\alpha$  and Prostacyclin Production in Lavaged Rat Lungs *In Vivo*, 1834  
 Verdú, Maria Teresa, Alonso, Benjamin, Burguillos, Sebastian, Martinez-Lage, Juan F.: Postpartum Subdural Hygroma after Epidural Analgesia, 867  
 Verghese, Susan T., McGill, Willis A., Patel, Ramesh I., Sell, Jeffrey E., Midgley, Frank M., Ruttimann, Urs E.: Ultrasound-guided Internal Jugular Venous Cannulation in Infants: A Prospective Comparison with the Traditional Palpation Method, 71  
 Vidovich, Mladen I., Lojeski, Edwin W.: Probable Carbon Dioxide Embolism during Endoscopically Assisted Varicose Vein Stripping, 1527  
 Vijayakumar, Elamana, *see* Chandhok, Dharmender  
 Vije, Hadassah, *see* Khalil, Samia  
 Vincent, Angela, *see* Martyn, J. A. Jeevendra  
 Virtanen, Raimo, *see* Eisenach, James C.  
 Vlasnic, Jon J., *see* Skubas, Nikolaos J.  
 Vogel, Werner, *see* Nau, Carla  
 Vogt, Josef, *see* Ensinger, Hermann  
 Von dem Busche, Katja, *see* Horn, Ernst-Peter  
 Von Dobschuetz, Ernst, Hoffmann, Tomas, Messmer, Konrad: Diaspirin Cross-linked Hemoglobin Effectively Restores Pancreatic Microcirculatory Failure in Hemorrhagic Shock, 1754  
 Vosberg, Axel, *see* Leger, Roland  
 Vuorte, Juha, *see* Pesonen, Eero J.

## AUTHOR INDEX TO VOLUME 91

## W

- Wagner, Larry E., II, Eaton, Michael, Sabnis, Salas S., Gingrich, Kevin J.: Meperidine and Lidocaine Block of Recombinant Voltage-Dependent  $\text{Na}^+$  Channels: Evidence that Meperidine is a Local Anesthetic, 1481
- Waisel, David B.: Nonpatient Care Obligations of Anesthesiologists, 1152
- Walker, Francis O., *see* Prielipp, Richard C.
- Wall, Ronald, *see* Cohen, Marsha M.
- Wang, Chen, *see* Pac-Soo, Chen K.
- Wang, Chuan-Chwan, *see* Lin, Chih-Chung
- Wang, Lars P., Hauerberg, John, Schmidt, Jes F.: Incidence of Spinal Epidural Abscess after Epidural Analgesia: A National 1-year Survey, 1928
- Wang, Xiao Wei, *see* Antognini, Joseph F.
- Wang, Yung-Liang, *see* Liu, Hung-Pin
- Ward, C. F.: New Temperature Monitoring Guidelines: An Observation and Caveat, 325
- Ward, C. F.: Preoperative History and Package Inserts, 899
- Wartier, David C., *see* Toller, Wolfgang G.
- Warm, Theodore, *see* Wiesel, Saul
- Warner, David O.: Vaporized Perfluorocarbon: Taking the "Liquid" out of Liquid Ventilation, 340
- Warrington, Richard, *see* Gall, Richard
- Waschke, Klaus F., *see* Lenz, Christian
- Watanabe, Ryuiku, *see* Nitahara, Keiichi
- Watanabe, Yukinaga, *see* Iida, Hiroki
- Watcha, Mehernoor F., *see* Tang, Jun
- Weigand, Markus A., Michel, André, Eckstein, Hans-Henning, Martin, Elke, Bardenheuer, Hubert J.: Adenosine: A Sensitive Indicator of Cerebral Ischemia during Carotid Endarterectomy, 414
- Wei, Hong, Pertovaara, Antti: Influence of Preemptive Treatment with MK-801, an *N*-methyl-D-aspartate Receptor Antagonist, on Development of Neuropathic Symptoms Induced by Spinal Nerve Ligation in the Rat, 313
- Weimann, Jörg, Bloch, Kenneth D., Takata, Masao, Steudel, Wolfgang, Zapol, Warren M.: Congenital NOS2 Deficiency Protects Mice from LPS-induced Hyporesponsiveness to Inhaled Nitric Oxide, 1744
- Weiskopf, Richard B.: Clinical Concepts and Commentary, 6
- Weller, Robert S.: Atlas of Regional Anesthesia, Second Edition, 1971
- Welte, Martin, *see* Spahn, Donat R.
- Wender, Ronald H., *see* Tang, Jun
- Wessel, David L., *see* Atz, Andrew M.
- Westphal, C. Klaus, *see* Byhahn, Christian
- Wetterslev, Jørn, *see* Dahl, Jørgen B.
- White, Paul F., *see* Hamza, Mohamed A.; *also see* Tang, Jun
- Whitwam, James G., *see* Ma, Daqing; *also see* Pac-Soo, Chen K.
- Whyte, Richard L., *see* Brodsky, Jay B.
- Wierda, J. Mark K. H., *see* Proost, Johannes H.
- Wiesel, Saul, Warm, Theodore: Fastrach Uses a Low-volume, High-pressure Cuff for the Endotracheal Tube System, 592
- Wight, Edward, *see* Neff, Thomas A.
- Wilder-Smith, Clive H., Hill, Lauren, Wilkins, Justin, Denny, Lynnette: Effects of Morphine and Tramadol on Somatic and Visceral Sensory Function and Gastrointestinal Motility after Abdominal Surgery, 639
- Wildling, Eckart, *see* Chiari, Astrid
- Wilhelm, Stefan, *see* Horn, Ernst-Peter
- Wilkins, Justin, *see* Wilder-Smith, Clive H.
- Williams, Andrea R., Tomlin, Keith: In Reply, 1176
- Williams-Russo, Pamela, Sharrock, Nigel E., Mattis, Steven, Liguori, Gregory A., Mancuso, Carol, Peterson, Margaret G., Hollenberg, James, Ranawat, Chitranjan, Salvati, Eduardo, Sculco, Thomas: Randomized Trial of Hypotensive Epidural Anesthesia in Older Adults, 926
- Witkowski, Thomas, *see* Miguel, Rafael
- Wittels, Bernard, *see* Cuenco, Joseph
- Wittmann, Karin, *see* Akca, Ozan
- Wolf, Gerald L., Sidebotham, George W.: Endotracheal Tube Fire: Comments on the Advisability of Not Extubating, 888
- Wong, David T., Cheng, Davy C. H., Kustra, Rafal, Tibshirani, Robert, Karski, Jacek, Carroll-Munro, Jo, Sandler, Alan: Risk Factors of Delayed Extubation, Prolonged Length of Stay in the Intensive Care Unit, and Mortality in Patients Undergoing Coronary Artery Bypass Graft with Fast-track Cardiac Anesthesia: A New Cardiac Risk Score, 936
- Wong, Hak Y., *see* Benzon, Honorio T.
- Wright, Peter M. C., *see* Fisher, Dennis M.
- Wu, King-Chuen, *see* Liu, Hung-Pin
- Wu, Rick Sai-Chuen, *see* Liu, Hung-Pin
- Wulf, Hinnerk, *see* Leger, Roland

## X

- Xiong, Zhigang, *see* Joo, Daisy T.
- Xu, Lijun, Koumenis, Iphigenia L., Tilly, Jonathan L., Giffard, Rona G.: Overexpression of *bcl-x<sub>i</sub>* Protects Astrocytes from Glucose Deprivation and Is Associated with Higher Glutathione, Ferritin, and Iron Levels, 1036

## Y

- Yadollahie, Mahboobeh, *see* Habibzadeh, Farrokh
- Yaksh, Tony L., *see* Chiari, Astrid; *also see* Yoon, Myung Ha
- Yamada, Yoshitsugu, *see* Kitamura, Takayuki
- Yamaguchi, Tokio, *see* Nishiyama, Tomoki
- Yamakura, Tomohiro, Sakimura, Kenji, Shi-

- moji, Koki: Direct Inhibition of the *N*-methyl-D-aspartate Receptor Channel by High Concentrations of Opioids, 1053
- Yamakura, Tomohiro, *see* Cardoso, Rita A.
- Yamamoto, Shuji, Kawana, Shin, Miyamoto, Atsushi, Ohshika, Hideyo, Namiki, Akiyoshi: Propofol-induced Depression of Cultured Rat Ventricular Myocytes Is Related to the  $\text{M}_2$  Acetylcholine Receptor-NO-cGMP Signaling Pathway, 1712
- Yamasato, Masatomo, *see* Nitahara, Keiichi
- Yamashita, Akiko, Kajikuri, Junko, Ohashi, Masuo, Kanmura, Yuichi, Itoh, Takeo: Inhibitory Effects of Propofol on Acetylcholine-induced, Endothelium-dependent Relaxation and Prostacyclin Synthesis in Rabbit Mesenteric Resistance Arteries, 1080
- Yamashita, Hiroshi, *see* Inoue, Yoshitaka
- Yamashita, Masao, Osaka, Yoshiko: A Simple and Handy Way To Affix a Safety Pin to an Earpiece Tubing, 1561
- Yamazaki, Mitsuki, *see* Stekiel, Thomas A.
- Yang, Chuen-Mao, *see* Lin, Chih-Chung
- Yatsu, Yuichi, *see* Kotani, Naoki
- Yli-Hankala, Arvi, Vakkuri, Anne, Särkelä, Mika, Lindgren, Leena, Korttila, Kari, Jäntti, Ville: Epileptiform Electroencephalogram during Mask Induction of Anesthesia with Sevoflurane, 1596
- Yokubol, Bencharatana, *see* Hirakata, Hideo
- Yoon, Myung Ha, Yaksh, Tony L.: Evaluation of Interaction between Gabapentin and Ibuprofen on the Formalin Test in Rats, 1006
- Yoshiya, Ikuto, *see* Ueyama, Hiroshi
- Young, Helen C.: In Reply, 593

## Z

- Zachariah, Vinu T., *see* Raines, Douglas E.
- Zahler, Stefan, *see* Heindl, Bernhard
- Zahn, Peter K., Brennan, Timothy J.: Incision-induced Changes in Receptive Field Properties of Rat Dorsal Horn Neurons, 772
- Zapol, Warren M., *see* Holzmänn, Alexandra; *also see* Steudel, Wolfgang; *also see* Weimann, Jörg
- Zappi, Lucia, Song, Pingfang, Nicosia, Sirianna, Nicosia, Francesco, Rehder, Kai: Do Pipecuronium and Rocuronium Affect Human Bronchial Smooth Muscle?, 1616
- Zarins, Christopher K., *see* Novak, Richard J.
- Zaugg, Michael, Tagliente, Thomas, Lucchinetti, Eliana, Jacobs, Ellis, Krol, Marina, Bodian, Carol, Reich, David L., Silverstein, Jeffrey H.: Beneficial Effects from  $\beta$ -Adrenergic Blockade in Elderly Patients Undergoing Noncardiac Surgery, 1674
- Zavrsky, Ana, *see* Chiari, Astrid
- Zemenick, R. Ben: Pretreatment Intravenous Lidocaine for Intubation of the Asthmatic Patient: More Data Are Needed, 318
- Zhang, Chousheng, Davies, M. Frances,

AUTHOR INDEX TO VOLUME 91

---

Guo, Tian-Zhi, Maze, Mervyn: The Analgesic Action of Nitrous Oxide Is Dependent on the Release of Norepinephrine in the Dorsal Horn of the Spinal Cord, 1401  
Zhang, Hao, *see* Amar, David

Zhang, Jie, *see* Egan, Talmage D.  
Zinserling, Jörg, *see* Rehberg, Benno  
Zisfein, James, Marks, Stephen J.: Tension Pneumothorax and Apnea Tests, 326  
Zornow, Mark H.: *Yao & Artusio's Anesthe-*

*siology: Problem-Oriented Patient Management, 4th Edition*. Edited by Fun-Sun F. Yao, 1562  
Zuperku, Edward J., *see* Stuth, Eckehard A. E.

